UNITED STATES
SECURITIES AND EXCHANGE COMMISSION
Washington, D.C. 20549
FORM 10-K

(Mark One)

☒ **ANNUAL REPORT PURSUANT TO SECTION 13 OR 15(d) OF THE SECURITIES EXCHANGE ACT OF 1934**
For the fiscal year ended December 31, 2016
OR

☐ **TRANSITION REPORT PURSUANT TO SECTION 13 OR 15(d) OF THE SECURITIES EXCHANGE ACT OF 1934**
For the transition period from _____ to _____

Commission file number: 000-21467

PACIFIC ETHANOL, INC.
(Exact name of registrant as specified in its charter)

Delaware	**41-2170618**
(State or other jurisdiction of incorporation or organization)	**(I.R.S. Employer Identification No.)**
400 Capitol Mall, Suite 2060, Sacramento, California	**95814**
(Address of principal executive offices)	**(Zip Code)**

Registrant's telephone number, including area code: (916) 403-2123

Securities registered pursuant to Section 12(b) of the Act:

Title of Class	**Name of Exchange on Which Registered**
Common Stock, $0.001 par value	The Nasdaq Stock Market LLC (Nasdaq Capital Market)

Securities registered pursuant to Section 12(g) of the Act: None

Indicate by check mark if the registrant is a well-known seasoned issuer, as defined in Rule 405 of the Securities Act. Yes ☐ No ☒

Indicate by check mark if the registrant is not required to file reports pursuant to Section 13 or Section 15(d) of the Act. Yes ☐ No ☒

Indicate by check mark whether the registrant (1) has filed all reports required to be filed by Section 13 or 15(d) of the Securities Exchange Act of 1934 during the preceding 12 months (or for such shorter period that the registrant was required to file such reports), and (2) has been subject to such filing requirements for the past 90 days. Yes ☒ No ☐

Indicate by check mark whether the registrant has submitted electronically and posted on its corporate Website, if any, every Interactive Data File required to be submitted and posted pursuant to Rule 405 of Regulation S-T during the preceding 12 months (or for such shorter period that the registrant was required to submit and post such files. Yes ☒ No ☐

Indicate by check mark if disclosure of delinquent filers in response to Item 405 of Regulation S-K is not contained herein, and will not be contained, to the best of registrant's knowledge, in definitive proxy or information statements incorporated by reference in Part III of this Form 10-K or any amendment to this Form 10-K. ☒

Indicate by check mark whether the registrant is a large accelerated filer, an accelerated filer, or a non-accelerated filer, or a smaller reporting company. See the definitions of "large accelerated filer," "accelerated filer" and "smaller reporting company" in Rule 12b-2 of the Exchange Act. (Check one):

Large accelerated filer ☐	Accelerated filer ☒
Non-accelerated filer ☐ (Do not check if a smaller reporting company)	Smaller reporting company ☐

Indicate by check mark whether the registrant is a shell company (as defined in Rule 12b-2 of the Act). Yes ☐ No ☒

The aggregate market value of the voting and non-voting common equity held by nonaffiliates of the registrant computed by reference to the closing sale price of such stock, was approximately $208.1 million as of June 30, 2016, the last business day of the registrant's most recently completed second fiscal quarter.

As of March 15, 2017, there were 39,811,296 shares of the registrant's common stock, $0.001 par value per share, and 3,540,132 shares of the registrant's non-voting common stock, $0.001 par value per share, outstanding.

DOCUMENTS INCORPORATED BY REFERENCE:
Part III incorporates by reference certain information from the registrant's proxy statement (the "Proxy Statement") for the 2016 Annual Meeting of Stockholders to be filed on or before April 28, 2017

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CAUTIONARY STATEMENT

All statements included or incorporated by reference in this Annual Report on Form 10-K, other than statements or characterizations of historical fact, are forward-looking statements. Examples of forward-looking statements include, but are not limited to, statements concerning projected net sales, costs and expenses and gross margins; our accounting estimates, assumptions and judgments; the demand for ethanol and its co-products; the competitive nature of and anticipated growth in our industry; production capacity and goals; our ability to consummate acquisitions and integrate their operations successfully; and our prospective needs for additional capital. These forward-looking statements are based on our current expectations, estimates, approximations and projections about our industry and business, management's beliefs, and certain assumptions made by us, all of which are subject to change. Forward-looking statements can often be identified by words such as "anticipates," "expects," "intends," "plans," "predicts," "believes," "seeks," "estimates," "may," "will," "should," "would," "could," "potential," "continue," "ongoing," similar expressions and variations or negatives of these words. These statements are not guarantees of future performance and are subject to risks, uncertainties and assumptions that are difficult to predict. Therefore, our actual results could differ materially and adversely from those expressed in any forward-looking statements as a result of various factors, some of which are listed under "Risk Factors" in Item 1A of this report. These forward-looking statements speak only as of the date of this report. We undertake no obligation to revise or update publicly any forward-looking statement for any reason, except as otherwise required by law.

PART I

Item 1. Business.

Business Overview

We are a leading producer and marketer of low-carbon renewable fuels in the United States.

We operate eight strategically-located ethanol production facilities. Four of our plants are in the Western states of California, Oregon and Idaho, and four of our plants are located in the Midwestern states of Illinois and Nebraska. We are the sixth largest producer of ethanol in the United States based on annualized volumes. Our plants have a combined ethanol production capacity of 515 million gallons per year. We market all the ethanol and co-products produced at our plants as well as ethanol produced by third parties. On an annualized basis, we market nearly 1.0 billion gallons of ethanol and over 1.5 million tons of ethanol co-products on a dry matter basis. Our business consists of two operating segments: a production segment and a marketing segment.

Our mission is to advance our position and significantly increase our market share as a leading producer and marketer of low-carbon renewable fuels in the United States. We intend to accomplish this goal in part by expanding our ethanol production capacity and distribution infrastructure, accretive acquisitions, lowering the carbon intensity of our ethanol, extending our marketing business into new regional and international markets, and implementing new technologies to promote higher production yields and greater efficiencies.

Production Segment

We produce ethanol and co-products at our production facilities described below. Our plants located on the West Coast are near their respective fuel and feed customers, offering significant timing, transportation cost and logistical advantages. Our plants located in the Midwest are in the heart of the Corn Belt, benefit from low-cost and abundant feedstock production and allow for access to many additional domestic markets. In addition, our ability to load unit trains from our plants located in the Midwest allows for greater access to international markets.

We wholly-own all of our plants located on the West Coast and the two plants in Pekin, Illinois. We own approximately 74% of the two plants in Aurora, Nebraska as well as the grain elevator adjacent to those properties and related grain handling assets, including the outer rail loop, and the real property on which they are located, through an entity owned approximately 26% by Aurora Cooperative Elevator Company, or ACEC.

Facility Name	Facility Location	Estimated Annual Capacity (gallons)
Magic Valley	Burley, ID	60,000,000
Columbia	Boardman, OR	40,000,000
Stockton	Stockton, CA	60,000,000
Madera	Madera, CA	40,000,000
Aurora West	Aurora, NE	110,000,000
Aurora East	Aurora, NE	45,000,000
Pekin Wet	Pekin, IL	100,000,000
Pekin Dry	Pekin, IL	60,000,000

We produce ethanol co-products at our production facilities such as wet distillers grains, or WDG, dry distillers grains with solubles, or DDGS, wet and dry corn gluten feed, condensed distillers solubles, corn gluten meal, corn germ, corn oil, distillers yeast and CO_2.

Marketing Segment

We market ethanol and co-products produced by our ethanol production facilities and market ethanol produced by third parties. We have extensive customer relationships throughout the Western and Midwestern United States. Our ethanol customers are integrated oil companies and gasoline marketers who blend ethanol into gasoline. Our customers depend on us to provide a reliable supply of ethanol, and manage the logistics and timing of delivery with very little effort on their part. Our customers collectively require ethanol volumes in excess of the supplies we produce at our production facilities. We secure additional ethanol supplies from third-party plants in California and other third-party suppliers in the Midwest where a majority of ethanol producers are located. We arrange for transportation, storage and delivery of ethanol purchased by our customers through our agreements with third-party service providers in the Western United States as well as in the Midwest from a variety of sources.

We market our distillers grains and other feed co-products to dairies and feedlots, in many cases located near our ethanol plants. These customers use our feed co-products for livestock as a substitute for corn and other sources of starch and protein. We sell our corn oil to poultry and biodiesel customers. We do not market co-products from other ethanol producers.

See "Note 5 – Segments" to our Notes to Consolidated Financial Statements included elsewhere in this report for financial information about our business segments.

Acquisition of Grain Elevator and Related Assets

On December 12, 2016, we entered into a contribution agreement with ACEC under which (i) we agreed to contribute to Pacific Aurora LLC, or Pacific Aurora, 100% of the equity interests of our wholly-owned subsidiaries, Pacific Ethanol Aurora East, LLC and Pacific Ethanol Aurora West, LLC, which own our Aurora East and Aurora West ethanol plants, respectively, to Pacific Aurora in exchange for approximately an 88% ownership interest in Pacific Aurora, and (ii) ACEC agreed to contribute to Pacific Aurora ACEC's grain elevator adjacent to the Aurora East and Aurora West properties and related grain handling assets, including the outer rail loop and the real property on which they are located, in exchange for approximately a 12% ownership interest in Pacific Aurora. On December 15, 2016, concurrently with the closing of the contribution transaction, we sold approximately a 14% ownership interest in Pacific Aurora to ACEC for $30.0 million in cash, resulting in our ownership of approximately 74% of Pacific Aurora and ACEC's ownership of approximately 26% of Pacific Aurora. The transaction with ACEC was immediately accretive to our stockholders and we expect the arrangement to reduce operating costs by over $5.0 million annually. In addition, the new arrangement fully integrates our Aurora, Nebraska plants and the grain facilities into a more functional and better performing single facility, enabling us to optimize grain procurement; more efficiently manage grain transfers; offer storage, drying and merchandising to local farmers; and providing us with additional growth opportunities.

For financial reporting purposes, we consolidate 100% of the results of Pacific Aurora and record the amount attributed to ACEC as noncontrolling interests under the voting rights model. Since we controlled Pacific Ethanol Aurora East, LLC and Pacific Ethanol Aurora West, LLC prior to forming Pacific Aurora, we recorded no gain or loss on the contribution and concurrent sale of a portion of our interests in Pacific Aurora.

Company History

We are a Delaware corporation formed in February 2005. Our common stock trades on The NASDAQ Capital Market under the symbol "PEIX." Our Internet website address is http://www.pacificethanol.com. Information contained on our website is not part of this Annual Report on Form 10-K. Our Annual Reports on Form 10-K, Quarterly Reports on Form 10-Q, Current Reports on Form 8-K and any amendments to such reports filed with or furnished to the Securities and Exchange Commission and other Securities and Exchange Commission filings are available free of charge through our website as soon as reasonably practicable after the reports are electronically filed with, or furnished to, the Securities and Exchange Commission.

Business Strategy

Our primary goal is to advance our position and significantly increase our market share as a leading producer and marketer of low-carbon renewable fuels in the United States. The key elements of our business and growth strategy to achieve this objective include:

- *Expand ethanol production capacity and distribution infrastructure*. We believe the United States ethanol production industry is poised for continued consolidation. We evaluate and intend to pursue opportunities to acquire additional ethanol production, storage and distribution facilities and related infrastructure as financial resources and business prospects make these acquisitions desirable. To this end, we are examining specific opportunities to extend our current production and marketing platform with strategic and synergistic acquisitions. In addition, we plan to expand our distribution infrastructure by increasing our ability to provide transportation, storage and related logistical services to our customers throughout the United States.

- *Lower the carbon intensity of our ethanol*. We plan to further reduce the carbon intensity of the ethanol we produce. We are able to sell this lower carbon intensity ethanol in certain regions at premium prices compared to higher carbon intensity ethanol. We are able to charge premium prices for this ethanol based on state laws and regulations, such as Low-Carbon Fuel Standards enacted in California and Oregon that require blenders to use lower carbon intensity ethanol in their gasoline. When available and cost-effective, we intend to use feedstock other than corn, including cellulosic feedstock, as the raw material used in the production of ethanol to further reduce the carbon intensity of our ethanol.

- *Extend our marketing business into new regional and international markets.* We have strengthened our market position in the Midwest through our acquisition in mid-2015 of Aventine Renewable Energy Holdings, Inc., now known as Pacific Ethanol Central, LLC, or Aventine. We intend to pursue opportunities to extend our marketing business into new regional markets within reach from our plants in Illinois and Nebraska. We also plan to continue to leverage our new relationships with our customers to market and sell additional ethanol sourced from third parties. In addition, we are exploring opportunities to market and sell ethanol internationally.

- *Implement new technologies.* We intend to continue to evaluate and implement new equipment and technologies to increase the production yields and efficiencies of our ethanol plants, reduce our use of carbon-based fuels, use other feedstocks and allow us to produce advanced biofuels as financial resources and market conditions justify these investments.

Competitive Strengths

We believe that our competitive strengths include the following:

- *Our customer and supplier relationships*. We have extensive business relationships with customers and suppliers throughout the United States. In addition, we have developed extensive business relationships with major and independent un-branded gasoline suppliers who collectively control the majority of all gasoline sales in those regions.

- *Our ethanol distribution network*. We believe we have a competitive advantage due to our experience in marketing to customers in major metropolitan and rural markets in the United States. We have developed an ethanol distribution network for delivery of ethanol by truck to virtually every significant fuel terminal as well as to numerous smaller fuel terminals throughout California and other Western states. Fuel terminals have limited storage capacity and we have successfully secured storage tanks at many of the terminals we service. In addition, we have an extensive network of third-party delivery trucks available to deliver ethanol throughout the Western United States. In the Midwest, we have the ability to sell and deliver products in bulk via unit trains providing us access to western, gulf coast and international markets. Further, the additional higher valued co-products can be sold at premium prices under fixed price, longer-term contracts (up to 12 months) thus providing a more stable source of revenue in what can be a volatile commodity industry.

- *Our strategic locations*. We operate our ethanol plants in markets where we believe their individual locations, as well as our overall ethanol production and marketing platform, provide strategic advantages. Our production in both the Western United States and in the Midwest enables us to source ethanol from two different regions, which we believe allows us to address regional inefficiencies and other challenges such as rail congestion and other supply constraints, as well as pricing anomalies.

  - We operate four plants in the Western United States where we believe local characteristics create an opportunity to capture a significant production and shipping cost advantage over competing ethanol production facilities in other regions. We believe a combination of factors enables us to achieve this cost advantage, including:

    - Locations near fuel blending facilities lower our ethanol transportation costs while providing timing and logistical advantages over competing locations that require ethanol to be shipped over much longer distances, and in many cases, require double-handling.

    - Locations adjacent to major rail lines allow the efficient delivery of corn in large unit trains from major corn-producing regions and allow for the efficient delivery of ethanol in large unit trains to other markets, including markets with higher demand.

    - Locations near large concentrations of dairy and/or beef cattle enable delivery of WDG, over short distances without the need for costly drying processes.

  - We operate four plants in the Midwest which enables us to participate in the largest regional ethanol market in the United States as well as international markets. Our Midwest locations, coupled with our locations in the Western United States, also allow us many advantages over locations solely on the West Coast, including:

    - Locations in diverse markets assist us in spreading commodity and basis price risks across markets and products, supporting our efforts to optimize margin management.

    - Locations in the Midwest enhance our overall hedging opportunities with a greater correlation to the highly-liquid physical and paper markets in Chicago.

    - Locations in diverse markets support heightened flexibility and alternatives in feedstock procurement for our various production facilities.

    - Our Illinois facilities provide excellent logistical access via rail, truck and barge. The relatively unique wet milling process at one of our Illinois facilities allows us to extract the highest use and value from each component of the corn kernel. As a result, the wet milling process generates a higher level of cost recovery from corn than that produced at a dry mill.

    - Locations in the Midwest allow us deeper market insight and engagement in major ethanol and feed markets outside the Western United States, thereby improving pricing opportunities.

- *Our low carbon-intensity ethanol.* California and Oregon have enacted Low-Carbon Fuel Standards for transportation fuels. Under these Low-Carbon Fuel Standards, the ethanol we produce at our production facilities in the Western United States has a lower carbon-intensity than most ethanol produced at plants by other producers. This is primarily because our plants located on the West Coast use less energy in their production processes. The ethanol produced in California by other producers, all of which we market, also has a lower carbon-intensity rating than either gasoline or ethanol produced in the Midwest. The lower carbon-intensity rating of ethanol we produce at our plants located on the West Coast or otherwise resell from third-party California producers is valued in the market by our customers and has enabled us to capture premium prices for this ethanol.

- *Modern technologies*. Our plants use the latest production technologies to take advantage of state-of-the-art technical and operational efficiencies to achieve lower operating costs, higher yields and more efficient production of ethanol and its co-products and reduce our use of carbon-based fuels.

- *Our experienced management.* Our senior management team has a proven track record with significant operational and financial expertise and many years of experience in the ethanol, fuel and energy industries. Our senior executives, who average approximately 15 years of industry experience, have successfully navigated a wide variety of business and industry-specific challenges and deeply understand of the business of successfully producing and marketing ethanol and its co-products.

We believe that these competitive strengths will help us attain our goal to advance our position and significantly increase our market share as a leading producer and marketer of low-carbon renewable fuels in the United States.

Industry Overview and Market Opportunity

Overview of Ethanol Market

The primary applications for fuel-grade ethanol in the United States include:

- *Octane enhancer*. On average, regular unleaded gasoline has an octane rating of 87 and premium unleaded gasoline has an octane rating of 91. In contrast, pure ethanol has an average octane rating of 113. Adding ethanol to gasoline enables refiners to produce greater quantities of lower octane blend stock with an octane rating of less than 87 before blending. In addition, ethanol is commonly added to finished regular grade gasoline as a means of producing higher octane mid-grade and premium gasoline.

- *Fuel blending*. In addition to its performance and environmental benefits, ethanol is used to extend fuel supplies. In light of the need for transportation fuel in the United States and the dependence on foreign crude oil and refined products, the United States is increasingly seeking domestic sources of fuel. Much of the ethanol blending throughout the United States is done for the purpose of extending the volume of fuel sold at the gasoline pump.

- *Renewable fuels*. Ethanol is blended with gasoline to enable gasoline refiners to comply with a variety of governmental programs, in particular, the national Renewable Fuel Standard, or RFS, which was enacted to promote alternatives to fossil fuels. See "—Governmental Regulation."

The United States ethanol industry is supported by federal and state legislation and regulation. For example, the Energy Independence and Security Act of 2007, which was signed into law in December 2007, significantly increased the prior RFS. Under the RFS, the mandated use of all renewable fuels rises incrementally in succeeding years and peaks at 36.0 billion gallons by 2022. Under the RFS, approximately 14.0 billion gallons in 2015 and 14.5 billion gallons in 2016 were required from conventional, or corn-based, ethanol. Under the RFS, 15.0 billion gallons are required from conventional ethanol in 2017. The RFS allows the Environmental Protection Agency, or EPA, to adjust the annual requirement based on certain facts.

According to the Renewable Fuels Association, the domestic ethanol industry produced a record of approximately 15.3 billion gallons of ethanol in 2016. We believe that the ethanol market in California alone represented approximately 10% of the national market. However, the Western United States has relatively few ethanol facilities and local ethanol production levels are substantially below the local demand for ethanol. The balance of ethanol is shipped via rail from the Midwest to the Western United States. Gasoline and diesel fuel that supply the major fuel terminals are shipped in pipelines throughout portions of the Western United States. Unlike gasoline and diesel fuel, however, ethanol is not shipped in these types of pipelines because ethanol has an affinity for mixing with water already present in the pipelines. When mixed, water dilutes ethanol and creates significant quality control issues. Therefore, ethanol must be trucked from rail terminals to regional fuel terminals, or blending racks.

We believe that approximately 90% of the ethanol produced in the United States is made in the Midwest from corn. According to the Department of Energy, or DOE, ethanol is generally blended at a rate of 10% by volume, but is also blended at a rate of up to 85% by volume for vehicles designed to operate on 85% ethanol. The EPA has increased the allowable blend of ethanol in gasoline from 10% by volume to 15% by volume for model year 2001 and newer automobiles, pending final approvals by certain state regulatory authorities. Some retailers have begun blending at higher rates in states that have approved higher blend rates.

Compared to gasoline, ethanol is generally considered to be cleaner burning and contains higher octane. We anticipate that the increasing demand for renewable transportation fuels coupled with limited opportunities for gasoline refinery expansions and the growing importance of reducing CO_2 emissions through the use of renewable fuels will generate additional growth in the demand for ethanol.

According to the DOE, total annual gasoline consumption in the United States is approximately 143 billion gallons and total annual ethanol consumption represented approximately 10% of this amount in 2016. The domestic ethanol industry has substantially reached this 10% blend ratio, and we believe the industry has significant potential for growth in the event the industry can migrate to an up to 15% blend ratio, which would translate into an annual demand of up to 20 billion gallons of ethanol.

Overview of Ethanol Production Process

Ethanol production from starch- or sugar-based feedstock is a highly-efficient process that we believe now yields substantially more energy from ethanol and its co-products than is required to make the products. The modern production of ethanol requires large amounts of corn, or other high-starch grains, and water as well as chemicals, enzymes and yeast, and denaturants including unleaded gasoline or liquid natural gas, in addition to natural gas and electricity.

Dry Milling Process

In the dry milling process, corn or other high-starch grain is first ground into meal, then slurried with water to form a mash. Enzymes are then added to the mash to convert the starch into the simple sugar, dextrose. Ammonia is also added for acidic (pH) control and as a nutrient for the yeast. The mash is processed through a high temperature cooking procedure, which reduces bacteria levels prior to fermentation. The mash is then cooled and transferred to fermenters, where yeast is added and the conversion of sugar to ethanol and CO_2 begins.

After fermentation, the resulting “beer” is transferred to distillation, where the ethanol is separated from the residual “stillage.” The ethanol is concentrated to 190 proof using conventional distillation methods and then is dehydrated to approximately 200 proof, representing 100% alcohol levels, in a molecular sieve system. The resulting anhydrous ethanol is then blended with about 2.5% denaturant, which is usually gasoline, and is then ready for shipment to market.

The residual stillage is separated into a coarse grain portion and a liquid portion through a centrifugation process. The soluble liquid portion is concentrated to about 40% dissolved solids by an evaporation process. This intermediate state is called condensed distillers solubles, or syrup. The coarse grain and syrup portions are then mixed to produce WDG or can be mixed and dried to produce dried distillers grain with solubles, or DDGS. Both WDG and DDGS are high-protein animal feed products.

Wet Milling Process

In the wet milling process, corn or other high-starch grain is first soaked or "steeped" in water for 24 – 48 hours to separate the grain into its many components. After steeping, the corn slurry is processed first to separate the corn germ, from which the corn oil can be further separated. The remaining fiber, gluten and starch components are further separated and sold.

The steeping liquor is concentrated in an evaporator. The concentrated product, called heavy steep water, is co-dried with the fiber component and is then sold as corn gluten feed. The gluten component is filtered and dried to produce corn gluten meal.

The starch and any remaining water from the mash is then processed into ethanol or dried and processed into corn syrup. The fermentation process for ethanol at this stage is similar to the dry milling process.

Overview of Distillers Grains Market

Distillers grains are produced as a co-product of ethanol production and are valuable components of feed rations primarily to dairies and beef cattle markets, both nationally and internationally. Our plants produce both WDG and DDGS. WDG is sold to customers proximate to the plants and DDGS is delivered by truck, rail and barge to customers in domestic and international markets.

Producing WDG also allows us to use up to one-third less process energy, thus reducing production costs and lowering the carbon footprint of these plants, thereby increasing demand in California where premiums are paid for the low-carbon attributes.

Historically, the market price for distillers grains has generally tracked the value of corn. We believe that the market price of WDG and DDGS is determined by a number of factors, including the market value of corn, soybean meal and other competitive ingredients, the performance or value of WDG and DDGS in a particular feed formulation and general market forces of supply and demand, including export markets for these co-products. The market price of distillers grains is also often influenced by nutritional models that calculate the feed value of distillers grains by nutritional content, as well as reliability of consistent supply.

Customers

We market and sell through our wholly-owned subsidiary, Kinergy Marketing LLC, or Kinergy, all of the ethanol produced by our production facilities. Kinergy also markets ethanol produced by third parties. We have extensive customer relationships throughout the Western and Midwestern United States. Our ethanol customers are integrated oil companies and gasoline marketers who blend ethanol into gasoline. Our customers depend on us to provide a reliable supply of ethanol, and manage the logistics and timing of delivery with very little effort on their side. Our customers collectively require ethanol volumes in excess of the supplies we produce at our production facilities. We secure additional ethanol supplies from third-party plants in California and other third-party suppliers in the Midwest where a majority of ethanol producers are located. We arrange for transportation, storage and delivery of ethanol purchased by our customers through our agreements with third-party service providers in the Western United States as well as in the Midwest from a variety of sources.

We also market all of the co-products produced at our plants. We do not market co-products from other ethanol producers. Our co-products include WDG, DDGS, wet and dry corn gluten feed, condensed distillers solubles, corn gluten meal, corn germ, corn oil, distillers yeast and CO_2. We market our distillers grains and other feed co-products to dairies and feedlots, in many cases located near our ethanol plants. These customers use our feed co-products for livestock as a substitute for corn and other sources of starch and protein. We sell our corn oil to poultry and biodiesel customers.

Our production segment generated $792.6 million, $527.7 million and $450.5 million in net sales for the years ended December 31, 2016, 2015 and 2014, respectively, from the sale of ethanol. Our production segment generated $253.2 million, $182.5 million and $111.9 million in net sales for the years ended December 31, 2016, 2015 and 2014, respectively, from the sale of co-products.

During 2016, 2015 and 2014, our production segment sold an aggregate of approximately 484.1 million, 319.2 million and 183.5 million gallons of fuel-grade ethanol and 2.8 million, 2.1 million and 1.5 million tons of ethanol co-products, respectively.

Our marketing segment generated $579.0 million, $481.0 million and $545.0 million in net sales for the years ended December 31, 2016, 2015 and 2014, respectively, from the sale of ethanol.

During 2016, 2015 and 2014, we produced or purchased ethanol from third parties and resold an aggregate of approximately 816 million, 594 million and 400 million gallons of fuel-grade ethanol to approximately 81, 69 and 41 customers, respectively. Sales to our three largest customers, Chevron Products USA, Valero Energy Corporation and Tesoro Refining and Marketing Company LLC in 2016, 2015 and 2014 represented an aggregate of approximately 35%, 39% and 51%, of our net sales, respectively. Sales to each of our other customers represented less than 10% of our net sales in each of 2016, 2015 and 2014.

Suppliers

Production Segment

Our ethanol production operations are dependent upon various raw materials suppliers, including suppliers of corn, natural gas, electricity and water. The cost of corn is the most important variable cost associated with our ethanol production. We source corn for our plants using standard contracts, including spot purchase, forward purchase and basis contracts. When resources are available, we seek to limit the exposure of our ethanol production operations to raw material price fluctuations by purchasing forward a portion of our corn requirements on a fixed price basis and by purchasing corn and other raw materials futures contracts.

During 2016, 2015 and 2014, purchases of corn from our three largest suppliers represented an aggregate of approximately 34%, 41% and 52% of our total corn purchases, respectively, for those periods. Purchases from each of our other corn suppliers represented less than 10% of total corn purchases in each of 2016, 2015 and 2014.

Marketing Segment

Our marketing operations are dependent upon various third-party producers of fuel-grade ethanol. In addition, we provide ethanol transportation, storage and delivery services through third-party service providers with whom we have contracted to receive ethanol at agreed upon locations from our third-party suppliers and to store and/or deliver the ethanol to agreed-upon locations on behalf of our customers. These contracts generally run from year-to-year, subject to termination by either party upon advance written notice before the end of the then current annual term.

During 2016, 2015 and 2014, we purchased and resold from third parties an aggregate of approximately 334 million, 274 million and 217 million gallons, respectively, of fuel-grade ethanol.

During 2016, 2015 and 2014, purchases of fuel-grade ethanol from our three largest third-party suppliers represented an aggregate of approximately 35%, 32% and 49% of our total third-party ethanol purchases, respectively, for those periods. Purchases from each of our other third-party ethanol suppliers represented less than 10% of total third-party ethanol purchases in each of 2016, 2015 and 2014.

Pacific Ethanol Plants

The table below provides an overview of our eight ethanol production facilities. Our plants have an aggregate annual production capacity of up to 515 million gallons. All of our plants are currently operational. As market conditions change, we may increase, decrease or idle production at one or more operational facilities or resume operations at any idled facility.

We wholly-own all of our plants located on the West Coast and the two plants in Pekin, Illinois. We own approximately 74% of the plants in Aurora, Nebraska as well as the grain elevator adjacent to those properties and related grain handling assets, including the outer rail loop, and the real property on which they are located, through Pacific Aurora, an entity owned approximately 26% by ACEC.

	Madera Facility	Columbia Facility	Magic Valley Facility	Stockton Facility
Location	Madera, CA	Boardman, OR	Burley, ID	Stockton, CA
Approximate maximum annual ethanol production capacity (in millions of gallons)	40	40	60	60
Production milling process	Dry	Dry	Dry	Dry
Primary energy source	Natural Gas	Natural Gas	Natural Gas	Natural Gas

	Pekin Wet Facility	Pekin Dry Facility	Aurora West Facility	Aurora East Facility
Location	Pekin, IL	Pekin, IL	Aurora, NE	Aurora, NE
Approximate maximum annual ethanol production capacity (in millions of gallons)	100	60	110	45
Production milling process	Wet	Dry	Dry	Dry
Primary energy source	Natural Gas	Natural Gas	Natural Gas	Natural Gas

Commodity Risk Management

We employ various risk mitigation techniques. For example, we may seek to mitigate our exposure to commodity price fluctuations by purchasing forward a portion of our corn and natural gas requirements through fixed-price or variable-price contracts with our suppliers, as well as entering into derivative contracts for ethanol, corn and natural gas. To mitigate ethanol inventory price risks, we may sell a portion of our production forward under fixed- or index-price contracts, or both. We may hedge a portion of the price risks by selling exchange-traded futures contracts. Proper execution of these risk mitigation strategies can reduce the volatility of our gross profit margins. However, given the nature of our business, we cannot effectively hedge against extreme volatility or certain market conditions. For example, ethanol prices, as reported by the Chicago Board of Trade, or CBOT, ranged from $1.31 to $1.75 per gallon during 2016, from $1.31 to $1.69 per gallon during 2015 and from $1.50 to $3.52 per gallon during 2014; and corn prices, as reported by the CBOT, ranged from $3.02 to $4.38 per bushel during 2016, from $3.48 to $4.34 per bushel during 2015 and from $3.21 to $5.16 per bushel during 2014.

Marketing Arrangements

We market all the ethanol produced at our production facilities. In addition, we have exclusive ethanol marketing agreements with two third-party ethanol producers, Calgren Renewable Fuels, LLC and AE Advanced Fuels Keyes, Inc., to market and sell their entire ethanol production volumes. Calgren Renewable Fuels, LLC owns and operates an ethanol production facility in Pixley, California with annual production capacity of 55 million gallons. AE Advanced Fuels Keyes, Inc. owns and operates an ethanol production facility in Keyes, California with annual production capacity of 55 million gallons. We intend to evaluate and pursue opportunities to enter into marketing arrangements with other third-party ethanol producers as business prospects make these marketing arrangements advisable.

Competition

We are the sixth largest producer of ethanol in the United States based on annualized volumes and operate in the highly competitive ethanol production and marketing industry. The largest ethanol producers in the United States are Archer Daniels Midland Company, Green Plains, Inc. and Valero Energy Corporation, collectively with approximately 30% of the total installed ethanol production capacity in the United States. In addition, there are many mid-size producers with several plants under ownership, smaller producers with one or two plants, and several ethanol marketers that create significant competition. Overall, we believe there are over 200 ethanol production facilities in the United States with a total installed production capacity of approximately 16.0 billion gallons and many brokers and marketers with whom we compete for sales of ethanol and its co-products.

We believe that our competitive strengths include our customer and supplier relationships, our extensive ethanol distribution network, our strategic locations, our low carbon-intensity ethanol, our use of modern technologies at our production facilities and our experienced management. We believe that these advantages will help us to attain our goal to advance our position and significantly increase our market share as a leading producer and marketer of low-carbon renewable fuels in the United States.

Most of the largest metropolitan areas in the United States have fuel terminals served by rail, but other major metropolitan areas and more remote smaller cities and rural areas do not. We believe that we have a competitive advantage in the Western United States in particular due to our experience in marketing to the segment of customers located in major metropolitan and rural markets in the Western United States. We manage the complicated logistics of shipping ethanol to intermediate storage locations throughout the Western United States and trucking the ethanol from these storage locations to blending racks where the ethanol is blended with gasoline. We believe that by establishing an efficient service for truck deliveries to these more remote locations, we have differentiated ourselves from our competitors on the West Coast. In addition, due to our plant locations on the West Coast, we believe that we benefit from our ability to increase spot sales of ethanol from those plants following ethanol price spikes caused from time to time by rail delays in delivering ethanol from the Midwest to the Western United States.

Our strategic locations in the Western United States designed to capitalize on cost efficiencies may nevertheless result in higher than expected costs as a result of more expensive raw materials and related shipping costs, including corn, which generally must be transported from the Midwest. If the costs of producing and shipping ethanol and its co-products over short distances are not advantageous relative to the costs of obtaining raw materials from the Midwest, then the benefits of our strategic locations on the West Coast may not be realized.

Governmental Regulation

Our business is subject to federal, state and local laws and regulations relating to the production of renewable fuels, the protection of the environment and in support of the corn and ethanol industries. These laws, their underlying regulatory requirements and their enforcement, some of which are described below, impact, or may impact, our existing and proposed business operations by imposing:

- restrictions on our existing and proposed business operations and/or the need to install enhanced or additional controls;
- the need to obtain and comply with permits and authorizations;
- liability for exceeding applicable permit limits or legal requirements, in some cases for the remediation of contaminated soil and groundwater at our facilities, contiguous and adjacent properties and other properties owned and/or operated by third parties; and
- specifications for the ethanol we market and produce.

In addition, some governmental regulations are helpful to our ethanol production and marketing business. The ethanol fuel industry is supported by federal and state mandates and environmental regulations that favor the use of ethanol in motor fuel blends in North America. Some of the governmental regulations applicable to our ethanol production and marketing business are briefly described below.

National Energy Legislation

The Energy Independence and Security Act of 2007, which was signed into law in December 2007, significantly increased the prior RFS. The RFS significantly increases the mandated use of renewable fuels, rising incrementally each year, to 36.0 billion gallons by 2022.

Under the provisions of the Energy Independence and Security Act of 2007, the EPA has the authority to waive the mandated RFS requirements in whole or in part. To grant a waiver, the EPA administrator must determine, in consultation with the Secretaries of Agriculture and Energy, that there is inadequate domestic renewable fuel supply or implementation of the requirement would severely harm the economy or environment of a state, region or the United States as a whole.

Legislation aimed at reducing or eliminating the renewable fuel use required by the RFS has been introduced since the 115 th United States Congress began on January 3, 2017. On January 3, 2017, the Leave Ethanol Volumes at Existing Levels (LEVEL) Act (H.R. 119) was introduced in the House of Representatives. The bill would freeze renewable fuel blending requirements under the RFS at 7.5 billion gallons per year, prohibit the sale of gasoline containing more than 10% ethanol, and revoke the EPA's approval of E15 blends. On January 31, 2017, a bill (H.R. 777) was introduced in the House of Representatives that would require the EPA and National Academies of Sciences to conduct a study on "the implications of the use of mid-level ethanol blends". A mid-level ethanol blend is an ethanol gasoline blend containing 10-20% ethanol by volume, including E15 and E20, that is intended to be used in any conventional gasoline powered motor vehicle or nonroad vehicle or engine. Also on January 31, 2017, a bill (H.R. 776) was introduced in the House of Representatives that would limit the volume of cellulosic biofuel required under the RFS to what is commercially available. On March 2, 2017, a bill (H.R. 1315) was introduced in the House of Representatives that would cap the volume of ethanol in gasoline at 10%. On the same day, the *RFS Elimination Act* (H.R. 1314) was introduced, which would fully repeal the RFS.

All of these bills were assigned to a congressional committee, which will consider them before possibly sending any of them on to the House of Representatives as a whole. No legislation affecting the RFS or ethanol has been introduced in the Senate so far this session.

E15 (a Blend of Gasoline and Ethanol)

The EPA has allowed fuel and fuel-additive manufacturers to introduce into commercial gasoline that contains greater than 10% ethanol by volume, up to 15% ethanol by volume, or E15, for vehicles from model year 2001 and beyond. Additional changes to some states' laws to allow for the use of E15 are still required; however, commercial sale of E15 has begun in some states. At the end of 2016, there were over 600 stations offering E15. We anticipate E15 sales and the number of stations offering E15 fuel will double in 2017.

State Energy Legislation and Regulations

In January 2007, California's Governor signed an executive order directing the California Air Resources Board to implement California's Low-Carbon Fuel Standard for transportation fuels. California's Low-Carbon Fuel Standard requires fuel suppliers to reduce the carbon intensity of transportation fuels to 10% below 2010 levels by 2020. The Governor's office estimates that the standard will have the effect of increasing current renewable fuels use in California by three to five times by 2020.

The California Air Resources Board has engaged in a comprehensive process to consider extending California's Low-Carbon Fuel Standard through 2030, applying aggressive new carbon intensity reduction targets for the final 10 years. We believe the revised program will be beneficial as we produce among the lowest carbon intensity ethanol commercially available, and we receive a premium for the fuel we sell into the California marketplace, which we expect will increase as the compliance curve steepens, which began in 2016.

A program similar to California's Low-Carbon Fuel Standard has also been adopted in Oregon and the Canadian province of British Columbia, and is under discussion in Washington State. These regions, together with California, represent a very large segment of the overall demand for transportation fuels in the United States.

Additional Environmental Regulations

In addition to the governmental regulations applicable to the ethanol production and marketing industry described above, our business is subject to additional federal, state and local environmental regulations, including regulations established by the EPA, the San Joaquin Valley Regional Water Quality Control Board, the San Joaquin Valley Air Pollution Control District and the California Air Resources Board. We cannot predict the manner or extent to which these regulations will harm or help our business or the ethanol production and marketing industry in general.

Employees

As of March 15, 2017, we had approximately 500 full-time employees. We believe that our employees are highly-skilled, and our success will depend in part upon our ability to retain our employees and attract new qualified employees, many of whom are in great demand. Approximately 140 of our employees are presently represented by a labor union and covered by a collective bargaining agreement. We have never had a work stoppage or strike and we consider our relations with our employees to be good.

Item 1A. Risk Factors.

Before deciding to purchase, hold or sell our common stock, you should carefully consider the risks described below in addition to the other information contained in this Report and in our other filings with the Securities and Exchange Commission, including subsequent reports on Forms 10-Q and 8-K. The risks and uncertainties described below are not the only ones we face. Additional risks and uncertainties not presently known to us or that we currently deem immaterial may also affect our business. If any of these known or unknown risks or uncertainties actually occurs with material adverse effects on Pacific Ethanol, our business, financial condition, results of operations and/or liquidity could be seriously harmed. In that event, the market price for our common stock will likely decline, and you may lose all or part of your investment.

Risks Related to our Business

We have incurred significant losses and negative operating cash flow in the past and we may incur losses and negative operating cash flow in the future, which may hamper our operations and impede us from expanding our business.

We have incurred significant losses and negative operating cash flow in the past. For the year ended December 31, 2015, we incurred consolidated net losses of approximately $18.9 million and incurred negative operating cash flow of $26.8 million. We may incur losses and negative operating cash flow in the future. We expect to rely on cash on hand, cash, if any, generated from our operations, borrowing availability under our lines of credit and proceeds from future financing activities, if any, to fund all of the cash requirements of our business. Continued losses and negative operating cash flow may hamper our operations and impede us from expanding our business.

Our results of operations and our ability to operate at a profit is largely dependent on managing the costs of corn and natural gas and the prices of ethanol, distillers grains and other ethanol co-products, all of which are subject to significant volatility and uncertainty.

Our results of operations are highly impacted by commodity prices, including the cost of corn and natural gas that we must purchase, and the prices of ethanol, distillers grains and other ethanol co-products that we sell. Prices and supplies are subject to and determined by market and other forces over which we have no control, such as weather, domestic and global demand, supply shortages, export prices and various governmental policies in the United States and around the world.

As a result of price volatility of corn, natural gas, ethanol, distillers grains and other ethanol co-products, our results of operations may fluctuate substantially. In addition, increases in corn or natural gas prices or decreases in ethanol, distillers grains or other ethanol co-product prices may make it unprofitable to operate. In fact, some of our marketing activities will likely be unprofitable in a market of generally declining ethanol prices due to the nature of our business. For example, to satisfy customer demands, we maintain certain quantities of ethanol inventory for subsequent resale. Moreover, we procure much of our inventory outside the context of a marketing arrangement and therefore must buy ethanol at a price established at the time of purchase and sell ethanol at an index price established later at the time of sale that is generally reflective of movements in the market price of ethanol. As a result, our margins for ethanol sold in these transactions generally decline and may turn negative as the market price of ethanol declines.

No assurance can be given that corn or natural gas can be purchased at, or near, current or any particular prices or that ethanol, distillers grains or other ethanol co-products will sell at, or near, current or any particular prices. Consequently, our results of operations and financial position may be adversely affected by increases in the price of corn or natural gas or decreases in the price of ethanol, distillers grains or other ethanol co-products.

Over the past several years, the spread between ethanol and corn prices has fluctuated significantly. Fluctuations are likely to continue to occur. A sustained narrow spread, whether as a result of sustained high or increased corn prices or sustained low or decreased ethanol prices, would adversely affect our results of operations and financial position. Further, combined revenues from sales of ethanol, distillers grains and other ethanol co-products could decline below the marginal cost of production, which may force us to suspend production of ethanol, distillers grains and ethanol co-products at some or all of our plants.

Increased ethanol production or higher inventory levels may cause a decline in ethanol prices or prevent ethanol prices from rising, and may have other negative effects, adversely impacting our results of operations, cash flows and financial condition.

We believe that the most significant factor influencing the price of ethanol has been the substantial increase in ethanol production in recent years. According to the Renewable Fuels Association, domestic ethanol production capacity increased from an annualized rate of 1.5 billion gallons per year in January 1999 to a record 16.0 billion gallons in 2016. In addition, if ethanol production margins improve, we anticipate that owners of ethanol production facilities will increase production levels, thereby resulting in more abundant ethanol supplies and inventories. Any increase in the demand for ethanol may not be commensurate with increases in the supply of ethanol, thus leading to lower ethanol prices. Also, demand for ethanol could be impaired due to a number of factors, including regulatory developments and reduced United States gasoline consumption. Reduced gasoline consumption has occurred in the past and could occur in the future as a result of increased gasoline or oil prices or other factors such as increased automobile fuel efficiency. Any of these outcomes could have a material adverse effect on our results of operations, cash flows and financial condition.

The market price of ethanol is volatile and subject to large fluctuations, which may cause our profitability or losses to fluctuate significantly.

The market price of ethanol is volatile and subject to large fluctuations. The market price of ethanol is dependent upon many factors, including the supply of ethanol and the price of gasoline, which is in turn dependent upon the price of petroleum which is highly volatile and difficult to forecast. For example, ethanol prices, as reported by the CBOT, ranged from $1.31 to $1.75 per gallon during 2016, $1.31 to $1.69 per gallon during 2015 and $1.50 to $3.52 per gallon during 2014. Fluctuations in the market price of ethanol may cause our profitability or losses to fluctuate significantly.

Some of our marketing activities will likely be unprofitable in a market of generally declining ethanol prices due to the nature of our business.

Some of our marketing activities will likely be unprofitable in a market of generally declining ethanol prices due to the nature of our business. For example, to satisfy customer demands, we maintain certain quantities of ethanol inventory for subsequent resale. Moreover, we procure much of our inventory outside the context of a marketing arrangement and therefore must buy ethanol at a price established at the time of purchase and sell ethanol at an index price established later at the time of sale that is generally reflective of movements in the market price of ethanol. As a result, our margins for ethanol sold in these transactions generally decline and may turn negative as the market price of ethanol declines.

Disruptions in ethanol production or distribution infrastructure may adversely affect our business, results of operations and financial condition.

Our business depends on the continuing availability of rail, road, port, storage and distribution infrastructure. In particular, due to limited storage capacity at our plants and other considerations related to production efficiencies, our plants depend on just-in-time delivery of corn. The production of ethanol also requires a significant and uninterrupted supply of other raw materials and energy, primarily water, electricity and natural gas. Local water, electricity and gas utilities may not be able to reliably supply the water, electricity and natural gas that our plants need or may not be able to supply those resources on acceptable terms. During 2014, poor weather caused disruptions in rail transportation, which slowed the delivery of ethanol by rail, the principle manner by which ethanol from our plants located in the Midwest is transported to market. Disruptions in the ethanol production or distribution infrastructure, whether caused by labor difficulties, earthquakes, storms, other natural disasters or human error or malfeasance or other reasons, could prevent timely deliveries of corn or other raw materials and energy, and could delay transport of our ethanol to market, and may require us to halt production at one or more plants, any of which could have a material adverse effect on our business, results of operations and financial condition.

We may engage in hedging transactions and other risk mitigation strategies that could harm our results of operations.

In an attempt to partially offset the effects of volatility of ethanol prices and corn and natural gas costs, we may enter into contracts to fix the price of a portion of our ethanol production or purchase a portion of our corn or natural gas requirements on a forward basis. In addition, we may engage in other hedging transactions involving exchange-traded futures contracts for corn, natural gas and unleaded gasoline from time to time. The financial statement impact of these activities is dependent upon, among other things, the prices involved and our ability to sell sufficient products to use all of the corn and natural gas for which forward commitments have been made. Hedging arrangements also expose us to the risk of financial loss in situations where the other party to the hedging contract defaults on its contract or, in the case of exchange-traded contracts, where there is a change in the expected differential between the underlying price in the hedging agreement and the actual prices paid or received by us. As a result, our results of operations and financial condition may be adversely affected by fluctuations in the price of corn, natural gas, ethanol and unleaded gasoline.

Operational difficulties at our plants could negatively impact sales volumes and could cause us to incur substantial losses.

Operations at our plants are subject to labor disruptions, unscheduled downtimes and other operational hazards inherent in the ethanol production industry, including equipment failures, fires, explosions, abnormal pressures, blowouts, pipeline ruptures, transportation accidents and natural disasters. Some of these operational hazards may cause personal injury or loss of life, severe damage to or destruction of property and equipment or environmental damage, and may result in suspension of operations and the imposition of civil or criminal penalties. Our insurance may not be adequate to fully cover the potential operational hazards described above or we may not be able to renew this insurance on commercially reasonable terms or at all.

Moreover, our plants may not operate as planned or expected. All of these facilities are designed to operate at or above a specified production capacity. The operation of these facilities is and will be, however, subject to various uncertainties. As a result, these facilities may not produce ethanol and its co-products at expected levels. In the event any of these facilities do not run at their expected capacity levels, our business, results of operations and financial condition may be materially and adversely affected.

Future demand for ethanol is uncertain and may be affected by changes to federal mandates, public perception, consumer acceptance and overall consumer demand for transportation fuel, any of which could negatively affect demand for ethanol and our results of operations.

Although many trade groups, academics and governmental agencies have supported ethanol as a fuel additive that promotes a cleaner environment, others have criticized ethanol production as consuming considerably more energy and emitting more greenhouse gases than other biofuels and potentially depleting water resources. Some studies have suggested that corn-based ethanol is less efficient than ethanol produced from other feedstock and that it negatively impacts consumers by causing increased prices for dairy, meat and other food generated from livestock that consume corn. Additionally, ethanol critics contend that corn supplies are redirected from international food markets to domestic fuel markets. If negative views of corn-based ethanol production gain acceptance, support for existing measures promoting use and domestic production of corn-based ethanol could decline, leading to reduction or repeal of federal mandates, which could adversely affect the demand for ethanol. These views could also negatively impact public perception of the ethanol industry and acceptance of ethanol as an alternative fuel.

There are limited markets for ethanol beyond those established by federal mandates. Discretionary blending and E85 blending are important secondary markets. Discretionary blending is often determined by the price of ethanol versus the price of gasoline. In periods when discretionary blending is financially unattractive, the demand for ethanol may be reduced. Also, the demand for ethanol is affected by the overall demand for transportation fuel. Demand for transportation fuel is affected by the number of miles traveled by consumers and the fuel economy of vehicles. Market acceptance of E15 may partially offset the effects of decreases in transportation fuel demand. A reduction in the demand for ethanol and ethanol co-products may depress the value of our products, erode our margins and reduce our ability to generate revenue or to operate profitably. Consumer acceptance of E15 and E85 fuels is needed before ethanol can achieve any significant growth in market share relative to other transportation fuels.

Our plant indebtedness exposes us to many risks that could negatively impact our business, our business prospects, our liquidity and our cash flows and results of operations.

Our plants located in the Midwest have significant indebtedness. Unlike traditional term debt, the terms of our plant loans require amortizing payments of principal over the lives of the loans and our borrowing availability under our plant credit facilities periodically and automatically declines through the maturity dates of those facilities. Our plant indebtedness could:

- make it more difficult to pay or refinance our debts as they become due during adverse economic and industry conditions because any decrease in revenues could cause us to not have sufficient cash flows from operations to make our scheduled debt payments;

- limit our flexibility to pursue strategic opportunities or react to changes in our business and the industry in which we operate and, consequently, place us at a competitive disadvantage to our competitors who have less debt;

- require a substantial portion of our cash flows from operations to be used for debt service payments, thereby reducing the availability of our cash flows to fund working capital, capital expenditures, acquisitions, dividend payments and other general corporate purposes; or

- Limit our ability to procure additional financing for working capital or other purposes.

Our term loans and credit facilities also require compliance with numerous financial and other covenants. In addition, our plant indebtedness bears interest at variable rates. An increase in prevailing interest rates would likewise increase our debt service obligations and could materially and adversely affect our cash flows and results of operations.

Our ability to generate sufficient cash to make all principal and interest payments when due depends on our performance, which is subject to a variety of factors beyond our control, including the supply of and demand for ethanol and co-products, ethanol and co-product prices, the cost of key production inputs, and many other factors incident to the ethanol production and marketing industry. We cannot provide any assurance that we will be able to timely satisfy such obligations. Our failure to timely satisfy our debt obligations could have a material adverse effect on our business, business prospects, liquidity, cash flows and results of operations.

If Kinergy fails to satisfy its financial covenants under its credit facility, it may experience a loss or reduction of that facility, which would have a material adverse effect on our financial condition and results of operations.

We are substantially dependent on Kinergy's credit facility to help finance its operations. Kinergy must satisfy monthly financial covenants under its credit facility, including fixed-charge coverage ratio covenants. Kinergy will be in default under its credit facility if it fails to satisfy any financial covenant. A default may result in the loss or reduction of the credit facility. The loss of Kinergy's credit facility, or a significant reduction in Kinergy's borrowing capacity under the facility, would result in Kinergy's inability to finance a significant portion of its business and would have a material adverse effect on our financial condition and results of operations.

The United States ethanol industry is highly dependent upon certain federal and state legislation and regulation and any changes in legislation or regulation could have a material adverse effect on our results of operations, cash flows and financial condition.

The EPA has implemented the RFS pursuant to the Energy Policy Act of 2005 and the Energy Independence and Security Act of 2007. The RFS program sets annual quotas for the quantity of renewable fuels (such as ethanol) that must be blended into motor fuels consumed in the United States. The domestic market for ethanol is significantly impacted by federal mandates under the RFS program for volumes of renewable fuels (such as ethanol) required to be blended with gasoline. Future demand for ethanol will be largely dependent upon incentives to blend ethanol into motor fuels, including the relative price of gasoline versus ethanol, the relative octane value of ethanol, constraints in the ability of vehicles to use higher ethanol blends, the RFS, and other applicable environmental requirements. Any significant increase in production capacity above the RFS minimum requirements may have an adverse impact on ethanol prices.

Legislation aimed at reducing or eliminating the renewable fuel use required by the RFS has been introduced in the United States Congress. On January 3, 2017, the Leave Ethanol Volumes at Existing Levels (LEVEL) Act (H.R. 119) was introduced in the House of Representatives. The bill would freeze renewable fuel blending requirements under the RFS at 7.5 billion gallons per year, prohibit the sale of gasoline containing more than 10% ethanol, and revoke the EPA's approval of E15 blends. On January 31, 2017, a bill (H.R. 777) was introduced in the House of Representatives that would require the EPA and National Academies of Sciences to conduct a study on "the implications of the use of mid-level ethanol blends". A mid-level ethanol blend is an ethanol gasoline blend containing 10-20% ethanol by volume, including E15 and E20, that is intended to be used in any conventional gasoline powered motor vehicle or nonroad vehicle or engine. Also on January 31, 2017, a bill (H.R. 776) was introduced in the House of Representatives that would limit the volume of cellulosic biofuel required under the RFS to what is commercially available. On March 2, 2017, a bill (H.R. 1315) was introduced in the House of Representatives that would cap the volume of ethanol in gasoline at 10%. On the same day, the *RFS Elimination Act* (H.R. 1314) was introduced, which would fully repeal the RFS.

All of these bills were assigned to a congressional committee, which will consider them before possibly sending any of them on to the House of Representatives as a whole. Our operations could be adversely impacted if any legislation is enacted that reduces or eliminates the RFS volume requirements or that reduces or eliminates corn ethanol as qualifying as a renewable fuel under the RFS.

Under the provisions of the Clean Air Act, as amended by the Energy Independence and Security Act of 2007, the EPA has limited authority to waive or reduce the mandated RFS requirements, which authority is subject to consultation with the Secretaries of Agriculture and Energy, and based on a determination that there is inadequate domestic renewable fuel supply or implementation of the applicable requirements would severely harm the economy or environment of a state, region or the United States. Our results of operations, cash flows and financial condition could be adversely impacted if the EPA reduces the RFS requirements from the statutory levels specified in the RFS.

The ethanol production and marketing industry is extremely competitive. Many of our significant competitors have greater production and financial resources and one or more of these competitors could use their greater resources to gain market share at our expense.

The ethanol production and marketing industry is extremely competitive. Many of our significant competitors in the ethanol production and marketing industry, including Archer Daniels Midland Company and Valero Energy Corporation, have substantially greater production and/or financial resources. As a result, our competitors may be able to compete more aggressively and sustain that competition over a longer period of time. Successful competition will require a continued high level of investment in marketing and customer service and support. Our limited resources relative to many significant competitors may cause us to fail to anticipate or respond adequately to new developments and other competitive pressures. This failure could reduce our competitiveness and cause a decline in market share, sales and profitability. Even if sufficient funds are available, we may not be able to make the modifications and improvements necessary to compete successfully.

We also face competition from international suppliers. Currently, international suppliers produce ethanol primarily from sugar cane and have cost structures that are generally substantially lower than our cost structures. Any increase in domestic or foreign competition could cause us to reduce our prices and take other steps to compete effectively, which could adversely affect our business, financial condition and results of operations.

Our ability to utilize net operating loss carryforwards and certain other tax attributes may be limited.

Federal and state income tax laws impose restrictions on the utilization of net operating loss, or NOL, and tax credit carryforwards in the event that an "ownership change" occurs for tax purposes, as defined by Section 382 of the Internal Revenue Code, or Code. In general, an ownership change occurs when stockholders owning 5% or more of a "loss corporation" (a corporation entitled to use NOL or other loss carryovers) have increased their ownership of stock in such corporation by more than 50 percentage points during any three-year period. The annual base limitation under Section 382 of the Code is calculated by multiplying the loss corporation's value at the time of the ownership change by the greater of the long-term tax-exempt rate determined by the Internal Revenue Service in the month of the ownership change or the two preceding months.

As of December 31, 2016, of our $117.7 million of federal NOLs, we had $101.4 million of federal NOLs that are limited in their annual use under Section 382 of the Code. Accordingly, our ability to utilize these NOL carryforwards may be substantially limited. These limitations could in turn result in increased future tax obligations, which could have a material adverse effect on our business, financial condition and results of operations.

Our business is not diversified. The high concentration of our sales within the ethanol production and marketing industry could result in a significant reduction in sales and negatively affect our profitability if demand for ethanol declines.

We expect to be completely focused on the production and marketing of ethanol and its co-products for the foreseeable future. We may be unable to shift our business focus away from the production and marketing of ethanol to other renewable fuels or competing products. Accordingly, an industry shift away from ethanol or the emergence of new competing products may reduce the demand for ethanol. A downturn in the demand for ethanol would likely materially and adversely affect our sales and profitability.

We may be adversely affected by environmental, health and safety laws, regulations and liabilities.

We are subject to various federal, state and local environmental laws and regulations, including those relating to the discharge of materials into the air, water and ground, the generation, storage, handling, use, transportation and disposal of hazardous materials and wastes, and the health and safety of our employees. In addition, some of these laws and regulations require us to operate under permits that are subject to renewal or modification. These laws, regulations and permits can often require expensive pollution control equipment or operational changes to limit actual or potential impacts to the environment. A violation of these laws and regulations or permit conditions can result in substantial fines, natural resource damages, criminal sanctions, permit revocations and/or facility shutdowns. In addition, we have made, and expect to make, significant capital expenditures on an ongoing basis to comply with increasingly stringent environmental laws, regulations and permits.

We may be liable for the investigation and cleanup of environmental contamination at each of our plants and at off-site locations where we arrange for the disposal of hazardous substances or wastes. If these substances or wastes have been or are disposed of or released at sites that undergo investigation and/or remediation by regulatory agencies, we may be responsible under the Comprehensive Environmental Response, Compensation and Liability Act of 1980, or other environmental laws for all or part of the costs of investigation and/or remediation, and for damages to natural resources. We may also be subject to related claims by private parties alleging property damage and personal injury due to exposure to hazardous or other materials at or from those properties. Some of these matters may require us to expend significant amounts for investigation, cleanup or other costs.

In addition, new laws, new interpretations of existing laws, increased governmental enforcement of environmental laws or other developments could require us to make significant additional expenditures. Continued government and public emphasis on environmental issues can be expected to result in increased future investments for environmental controls at our plants. Present and future environmental laws and regulations, and interpretations of those laws and regulations, applicable to our operations, more vigorous enforcement policies and discovery of currently unknown conditions may require substantial expenditures that could have a material adverse effect on our results of operations and financial condition.

The hazards and risks associated with producing and transporting our products (including fires, natural disasters, explosions and abnormal pressures and blowouts) may also result in personal injury claims or damage to property and third parties. As protection against operating hazards, we maintain insurance coverage against some, but not all, potential losses. However, we could sustain losses for uninsurable or uninsured risks, or in amounts in excess of existing insurance coverage. Events that result in significant personal injury or damage to our property or third parties or other losses that are not fully covered by insurance could have a material adverse effect on our results of operations and financial condition.

If we are unable to attract or retain key personnel, our ability to operate effectively may be impaired, which could have a material adverse effect on our business, financial condition and results of operations.

Our ability to operate our business and implement strategies depends, in part, on the efforts of our executive officers and other key personnel. Our future success will depend on, among other factors, our ability to retain our current key personnel and attract and retain qualified future key personnel, particularly executive management. If we are unable to attract or retain key personnel, our ability to operate effectively may be impaired, which could have a material adverse effect on our business, financial condition and results of operations.

We depend on a small number of customers for the majority of our sales. A reduction in business from any of these customers could cause a significant decline in our overall sales and profitability.

The majority of our sales are generated from a small number of customers. During 2016, 2015 and 2014, three customers accounted for an aggregate of approximately $572 million, $467 million and $569 million in net sales, representing 35%, 39% and 51% of our net sales, respectively, for those periods. We expect that we will continue to depend for the foreseeable future upon a small number of customers for a significant portion of our sales. Our agreements with these customers generally do not require them to purchase any specified volume or dollar value of ethanol or co-products, or to make any purchases whatsoever. Therefore, in any future period, our sales generated from these customers, individually or in the aggregate, may not equal or exceed historical levels. If sales to any of these customers cease or decline, we may be unable to replace these sales with sales to either existing or new customers in a timely manner, or at all. A cessation or reduction of sales to one or more of these customers could cause a significant decline in our overall sales and profitability.

Our lack of long-term ethanol orders and commitments by our customers could lead to a rapid decline in our sales and profitability.

We cannot rely on long-term ethanol orders or commitments by our customers for protection from the negative financial effects of a decline in the demand for ethanol or a decline in the demand for our marketing services. The limited certainty of ethanol orders can make it difficult for us to forecast our sales and allocate our resources in a manner consistent with our actual sales. Moreover, our expense levels are based in part on our expectations of future sales and, if our expectations regarding future sales are inaccurate, we may be unable to reduce costs in a timely manner to adjust for sales shortfalls. Furthermore, because we depend on a small number of customers for a significant portion of our sales, the magnitude of the ramifications of these risks is greater than if our sales were less concentrated. As a result of our lack of long-term ethanol orders and commitments, we may experience a rapid decline in our sales and profitability.

There are limitations on our ability to receive distributions from our subsidiaries.

We conduct most of our operations through subsidiaries and are dependent upon dividends or other intercompany transfers of funds from our subsidiaries to generate free cash flow. Moreover, some of our subsidiaries are limited in their ability to pay dividends or make distributions, loans or advances to us by the terms of their financing arrangements. At December 31, 2016, we had approximately $287.2 million of net assets at our subsidiaries that were not available to be distributed in the form of dividends, distributions, loans or advances due to restrictions contained in their financing arrangements.

Risks Related to Ownership of our Common Stock

Our stock price is highly volatile, which could result in substantial losses for investors purchasing shares of our common stock and in litigation against us.

The market price of our common stock has fluctuated significantly in the past and may continue to fluctuate significantly in the future. The market price of our common stock may continue to fluctuate in response to one or more of the following factors, many of which are beyond our control:

- fluctuations in the market prices of ethanol and its co-products;
- the cost of key inputs to the production of ethanol, including corn and natural gas;
- the volume and timing of the receipt of orders for ethanol from major customers;
- competitive pricing pressures;
- our ability to timely and cost-effectively produce, sell and deliver ethanol;
- the announcement, introduction and market acceptance of one or more alternatives to ethanol;
- changes in market valuations of companies similar to us;
- stock market price and volume fluctuations generally;
- regulatory developments or increased enforcement;
- fluctuations in our quarterly or annual operating results;
- additions or departures of key personnel;
- our ability to obtain any necessary financing;
- our financing activities and future sales of our common stock or other securities; and
- our ability to maintain contracts that are critical to our operations.

Demand for ethanol could be adversely affected by a slow-down in the overall demand for oxygenate and gasoline additive products. The levels of our ethanol production and purchases for resale will be based upon forecasted demand. Accordingly, any inaccuracy in forecasting anticipated revenues and expenses could adversely affect our business. The failure to receive anticipated orders or to complete delivery in any quarterly period could adversely affect our results of operations for that period. Quarterly and annual results are not necessarily indicative of future performance for any particular period, and we may not experience revenue growth or profitability on a quarterly or an annual basis.

The price at which you purchase shares of our common stock may not be indicative of the price that will prevail in the trading market. You may be unable to sell your shares of common stock at or above your purchase price, which may result in substantial losses to you and which may include the complete loss of your investment. In the past, securities class action litigation has often been brought against a company following periods of high stock price volatility. We may be the target of similar litigation in the future. Securities litigation could result in substantial costs and divert management’s attention and our resources away from our business.

Any of the risks described above could have a material adverse effect on our results of operations or the price of our common stock, or both.

Upon the conversion of our outstanding non-voting common stock, if the resulting shares of common stock are resold into the market, or if a perception exists that a substantial number of shares of common stock may be issued and then resold into the market, the market price of our common stock and the value of your investment could decline significantly.

We have non-voting common stock outstanding that may be converted into our common stock. Sales of a substantial number of shares of our common stock underlying our non-voting common stock, or even the perception that these sales could occur, could adversely affect the market price of our common stock. As a result, you could experience a significant decline in the value of your investment

Item 1B. Unresolved Staff Comments.

We have received no written comments regarding our periodic or current reports from the staff of the Securities and Exchange Commission that were issued 180 days or more preceding the end of our 2016 fiscal year and that remain unresolved.

Item 2. Properties.

Our corporate headquarters, located in Sacramento, California, consists of a 10,000 square foot office under a lease expiring in 2018. We have plants located in Madera, California, at a 137 acre facility; Boardman, Oregon, at a 25 acre facility; Burley, Idaho, at a 160 acre facility; and Stockton, California, at a 30 acre facility. We own the land in Madera, California and Burley, Idaho. The land in Boardman, Oregon and Stockton, California are leased under leases expiring in 2026 and 2022, respectively. We also have plants located in Pekin, Illinois at a 94 acre facility and Aurora, Nebraska, at a 96 acre facility. We own the land in Pekin, Illinois and Aurora, Nebraska, as well as the grain handling facility, loop track and the real property on which they are located in Aurora, Nebraska. We also own an idled ethanol production facility in Canton, Illinois on a 289 acre facility, of which a significant portion is farm land. Our production segment includes ethanol production facilities. See “Business—Production Facilities.”

Item 3. Legal Proceedings.

We are subject to legal proceedings, claims and litigation arising in the ordinary course of business. While the amounts claimed may be substantial, the ultimate liability cannot presently be determined because of considerable uncertainties that exist. Therefore, it is possible that the outcome of those legal proceedings, claims and litigation could adversely affect our quarterly or annual operating results or cash flows when resolved in a future period. However, based on facts currently available, management believes such matters will not adversely affect in any material respect our financial position, results of operations or cash flows.

Western Sugar Cooperative

Pacific Ethanol, Inc., through a subsidiary acquired in its acquisition of Aventine, became involved in a pending lawsuit with Western Sugar Cooperative (“Western Sugar”) that pre-dated the Aventine acquisition.

On February 27, 2015, Western Sugar filed a complaint in the United States District Court for the District of Colorado (Case No. 1:15-cv-00415) naming Aventine Renewable Energy, Inc. (“ARE, Inc.”), one of Aventine’s subsidiaries, as defendant. Western Sugar amended its complaint on April 21, 2015. ARE, Inc. purchased surplus sugar through a United States Department of Agriculture program. Western Sugar was one of the entities that warehoused this sugar for ARE, Inc. The suit alleged that ARE, Inc. breached its contract with Western Sugar by failing to pay certain penalty rates for the storage of its sugar or alternatively failing to pay a premium rate for storage. Western Sugar alleged that the penalty rates applied because ARE, Inc. failed to take timely delivery or otherwise cause timely shipment of the sugar. Western Sugar claimed “expectation damages” in the amount of approximately $8.6 million. ARE, Inc. filed answers to Western Sugar’s complaint and amended complaint generally denying Western Sugar’s allegations and asserting various defenses. On December 29, 2016, Western Sugar and ARE, Inc. entered into a settlement pursuant to which ARE Inc. paid $1.7 million and Western Sugar filed a Stipulation of Dismissal with prejudice. As a result we reduced our litigation reserve by $1.1 million and recognized the amount as a recovery in selling, general and administrative expenses for the year ended December 31, 2016.

Item 4. Mine Safety Disclosures.

Not applicable.

PART II

Item 5. Market For Registrant's Common Equity, Related Stockholder Matters and Issuer Purchases of Equity Securities.

Market Information

Our common stock trades on The NASDAQ Capital Market under the symbol "PEIX". We also have non-voting common stock outstanding which is not listed on an exchange. The table below shows, for each fiscal quarter indicated, the high and low sales prices of shares of our common stock. The prices shown reflect inter-dealer prices, without retail mark-up, mark-down or commission, and may not necessarily represent actual transactions.

	Price Range	
	High	**Low**
Year Ended December 31, 2016:		
First Quarter (January 1 – March 31)	$ 5.85	$ 2.41
Second Quarter (April 1 – June 30)	$ 6.76	$ 3.67
Third Quarter (July 1 – September 30)	$ 7.50	$ 5.37
Fourth Quarter (October 1 – December 31)	$ 10.95	$ 5.75
Year Ended December 31, 2015:		
First Quarter	$ 12.16	$ 7.51
Second Quarter	$ 13.70	$ 9.90
Third Quarter	$ 10.45	$ 6.11
Fourth Quarter	$ 7.64	$ 3.74

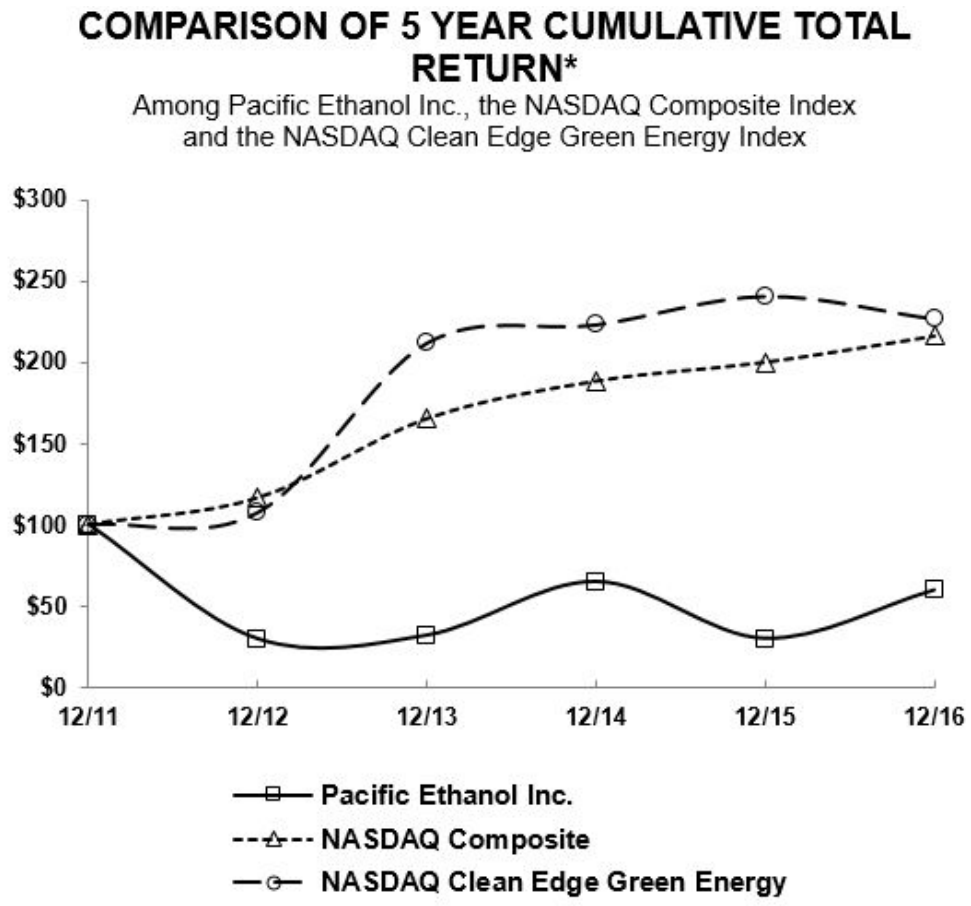
Security Holders

As of March 15, 2017, we had 39,811,296 shares of common stock outstanding held of record by approximately 270 stockholders and 3,540,132 shares of non-voting common stock outstanding held of record by one stockholder. These holders of record include depositories that hold shares of stock for brokerage firms which, in turn, hold shares of stock for numerous beneficial owners. On March 14, 2017, the closing sales price of our common stock on The NASDAQ Capital Market was $7.00 per share.

Performance Graph

The graph below shows a comparison of the cumulative total stockholder return on our common stock with the cumulative total return on The NASDAQ Composite Index and The NASDAQ Clean Edge Green Energy Index, or Peer Group, in each case over the five-year period ended December 31, 2016.

The graph assumes $100 invested at the indicated starting date in our common stock and in each of The NASDAQ Composite Index and the Peer Group, with the reinvestment of all dividends. We have not paid or declared any cash dividends on our common stock and do not anticipate paying any cash dividends on our common stock in the foreseeable future. Stockholder returns over the indicated periods should not be considered indicative of future stock prices or stockholder returns. This graph assumes that the value of the investment in our common stock and each of the comparison groups was $100 on December 31, 2011.



	Cumulative Total Return ($)					
	12/11	12/12	12/13	12/14	12/15	12/16
PACIFIC ETHANOL, INC.	100.00	29.82	32.01	64.97	30.06	59.75
THE NASDAQ COMPOSITE INDEX	100.00	116.41	165.47	188.69	200.32	216.54
THE NASDAQ CLEAN EDGE GREEN ENERGY INDEX	100.00	107.45	212.14	223.41	241.05	227.07

Dividend Policy

We have never paid cash dividends on our common stock and do not intend to pay cash dividends on our common stock in the foreseeable future. We anticipate that we will retain any earnings for use in the continued development of our business.

Our current and future debt financing arrangements may limit or prevent cash distributions from our subsidiaries to us, depending upon the achievement of specified financial and other operating conditions and our ability to properly service our debt, thereby limiting or preventing us from paying cash dividends. Further, the holders of our outstanding Series B Preferred Stock are entitled to dividends of 7% per annum, payable quarterly in arrears. In 2014, 2015 and 2016, we declared and paid in cash dividends on our outstanding shares of Series B Preferred Stock as they became due. Accrued and unpaid dividends in respect of our Series B Preferred Stock must be paid prior to the payment of any dividends in respect of shares of our common stock.

Recent Sales of Unregistered Securities

None.

Purchases of Equity Securities by the Issuer and Affiliated Purchasers

None.

Item 6. Selected Financial Data.

The following table sets forth our selected consolidated financial data. We prepared this information using our consolidated financial statements for each of the years ended December 31, 2016, 2015, 2014, 2013 and 2012.

You should read this selected consolidated financial data together with the consolidated financial statements and related notes contained in this report and in our prior and subsequent reports filed with the Securities and Exchange Commission, as well as the section of this report and our other reports entitled "Management's Discussion and Analysis of Financial Condition and Results of Operations." The historical results that appear below are not necessarily indicative of results to be expected for any future periods.

	Years Ended December 31,				
	2016	**2015**	**2014**	**2013**	**2012**
	(in thousands, except per share data)				
Consolidated Statements of Operations Data:					
Net sales	$ 1,624,758	$ 1,191,176	$ 1,107,412	$ 908,437	$ 816,044
Cost of goods sold	1,572,926	1,183,766	998,927	875,507	835,568
Gross profit (loss)	51,832	7,410	108,485	32,930	(19,524)
Selling, general and administrative expenses	28,323	23,412	17,108	14,021	12,141
Asset impairment	–	1,970	–	–	–
Income (loss) from operations	23,509	(17,972)	91,377	18,909	(31,665)
Fair value adjustments and warrant inducements	(557)	1,641	(37,532)	(1,013)	1,954
Interest expense, net	(22,406)	(12,594)	(9,438)	(15,671)	(13,049)
Loss on extinguishments of debt	–	–	(2,363)	(3,035)	–
Other income (expense), net	(1)	18	(905)	(352)	(595)
Income (loss) before provision for income taxes	545	(28,907)	41,139	(1,162)	(43,355)
Provision (benefit) for income taxes	(981)	(10,034)	15,137	–	–
Consolidated net income (loss)	1,526	(18,873)	26,002	(1,162)	(43,355)
Net (income) loss attributed to noncontrolling interests	(107)	87	(4,713)	381	24,298
Net income (loss) attributed to Pacific Ethanol, Inc.	$ 1,419	$ (18,786)	$ 21,289	$ (781)	$ (19,057)
Preferred stock dividends	(1,269)	(1,265)	(1,265)	(1,265)	(1,268)
Income allocated to participating securities	(2)	–	(585)	–	–
Income (loss) available to common stockholders	$ 148	$ (20,051)	$ 19,439	$ (2,046)	$ (20,325)
Income (loss) per share, basic	$ 0.00	$ (0.60)	$ 0.93	$ (0.17)	$ (2.81)
Income (loss) per share, diluted	$ 0.00	$ (0.60)	$ 0.86	$ (0.17)	$ (2.81)
Weighted-average shares outstanding, basic	42,182	33,173	20,810	12,264	7,224
Weighted-average shares outstanding, diluted	42,251	33,173	22,669	12,264	7,224
Consolidated Balance Sheet Data:					
Cash and cash equivalents	$ 68,590	$ 52,712	$ 62,084	$ 5,151	$ 7,586
Working capital	$ 156,360	$ 125,033	$ 112,498	$ 51,161	$ 45,017
Total assets	$ 708,238	$ 674,680	$ 297,540	$ 239,986	$ 213,516
Long-term debt, net of current portion	$ 188,028	$ 203,861	$ 34,177	$ 98,095	$ 119,835
Stockholders' equity	$ 418,261	$ 371,544	$ 217,982	$ 94,901	$ 72,907

No cash dividends on our common stock were declared during any of the periods presented above.

Item 7. Management's Discussion and Analysis of Financial Condition and Results of Operations.

The following discussion and analysis of our financial condition and results of operations should be read in conjunction with our consolidated financial statements and notes to consolidated financial statements included elsewhere in this report. This discussion contains forward-looking statements, reflecting our plans and objectives that involve risks and uncertainties. Actual results and the timing of events may differ materially from those contained in these forward-looking statements due to a number of factors, including those discussed in the section entitled "Risk Factors" and elsewhere in this report.

Overview

We are a leading producer and marketer of low-carbon renewable fuels in the United States.

We own and operate eight strategically-located ethanol production facilities. Four of our plants are in the Western states of California, Oregon and Idaho, and four of our plants are located in the Midwestern states of Illinois and Nebraska. We are the sixth largest producer of ethanol in the United States based on annualized volumes. Our plants have a combined ethanol production capacity of 515 million gallons per year. We market all the ethanol and co-products produced at our plants as well as ethanol produced by third parties. On an annualized basis, we market nearly 1.0 billion gallons of ethanol and over 1.5 million tons of ethanol co-products on a dry matter basis. Our business consists of two operating segments: a production segment and a marketing segment.

Our mission is to advance our position and significantly increase our market share as a leading producer and marketer of low-carbon renewable fuels in the United States. We intend to accomplish this goal in part by expanding our ethanol production capacity and distribution infrastructure, accretive acquisitions, lowering the carbon intensity of our ethanol, extending our marketing business into new regional and international markets, and implementing new technologies to promote higher production yields and greater efficiencies.

Production Segment

We produce ethanol and co-products at our production facilities described below. Our plants located on the West Coast are near their respective fuel and feed customers, offering significant timing, transportation cost and logistical advantages. Our plants located in the Midwest are in the heart of the Corn Belt, benefit from low-cost and abundant feedstock production and allow for access to many additional domestic markets. In addition, our ability to load unit trains from our plants located in the Midwest allows for greater access to international markets.

We wholly-own all of our plants located on the West Coast and the two plants in Pekin, Illinois. We own approximately 74% of the two plants in Aurora, Nebraska as well as the grain elevator adjacent to those properties and related grain handling assets, including the outer rail loop, and the real property on which they are located, through an entity owned approximately 26% by Aurora Cooperative Elevator Company, or ACEC.

Facility Name	Facility Location	Estimated Annual Capacity (gallons)
Magic Valley	Burley, ID	60,000,000
Columbia	Boardman, OR	40,000,000
Stockton	Stockton, CA	60,000,000
Madera	Madera, CA	40,000,000
Aurora West	Aurora, NE	110,000,000
Aurora East	Aurora, NE	45,000,000
Pekin Wet	Pekin, IL	100,000,000
Pekin Dry	Pekin, IL	60,000,000

We produce ethanol co-products at our production facilities such as wet distillers grains, or WDG, dry distillers grains with solubles, or DDGS, wet and dry corn gluten feed, condensed distillers solubles, corn gluten meal, corn germ, corn oil, distillers yeast and CO_2.

Marketing Segment

We market ethanol and co-products produced by our ethanol production facilities and market ethanol produced by third parties. We have extensive customer relationships throughout the Western and Midwestern United States. Our ethanol customers are integrated oil companies and gasoline marketers who blend ethanol into gasoline. Our customers depend on us to provide a reliable supply of ethanol, and manage the logistics and timing of delivery with very little effort on their part. Our customers collectively require ethanol volumes in excess of the supplies we produce at our production facilities. We secure additional ethanol supplies from third-party plants in California and other third-party suppliers in the Midwest where a majority of ethanol producers are located. We arrange for transportation, storage and delivery of ethanol purchased by our customers through our agreements with third-party service providers in the Western United States as well as in the Midwest from a variety of sources.

We market our distillers grains and other feed co-products to dairies and feedlots, in many cases located near our ethanol plants. These customers use our feed co-products for livestock as a substitute for corn and other sources of starch and protein. We sell our corn oil to poultry and biodiesel customers. We do not market co-products from other ethanol producers.

See "Note 5 – Segments" to our Notes to Consolidated Financial Statements included elsewhere in this report for financial information about our business segments.

Acquisition of Grain Elevator and Related Assets

On December 12, 2016, we entered into a contribution agreement with ACEC under which (i) we agreed to contribute to Pacific Aurora LLC, or Pacific Aurora, 100% of the equity interests of our wholly-owned subsidiaries, Pacific Ethanol Aurora East, LLC and Pacific Ethanol Aurora West, LLC, which own our Aurora East and Aurora West ethanol plants, respectively, to Pacific Aurora in exchange for approximately an 88% ownership interest in Pacific Aurora, and (ii) ACEC agreed to contribute to Pacific Aurora ACEC's grain elevator adjacent to the Aurora East and Aurora West properties and related grain handling assets, including the outer rail loop and the real property on which they are located, in exchange for approximately a 12% ownership interest in Pacific Aurora. On December 15, 2016, concurrently with the closing of the contribution transaction, we sold approximately a 14% ownership interest in Pacific Aurora to ACEC for $30.0 million in cash, resulting in our ownership of approximately 74% of Pacific Aurora and ACEC's ownership of approximately 26% of Pacific Aurora.

For financial reporting purposes, we consolidate 100% of the results of Pacific Aurora and record the amount attributed to ACEC as noncontrolling interests under the voting rights model. Since we controlled Pacific Ethanol Aurora East, LLC and Pacific Ethanol Aurora West, LLC prior to forming Pacific Aurora, we recorded no gain or loss on the contribution and concurrent sale of a portion of our interests in Pacific Aurora.

Current Initiatives and Outlook

During the fourth quarter of 2016, and for 2016 as a whole compared to 2015, we experienced improved crush margins, which reflect ethanol and co-product sales prices relative to production inputs such as corn and natural gas. Domestic ethanol demand remained strong throughout 2016 while exports grew year-over-year. Ethanol supply and demand on the whole were well balanced, providing stronger market conditions in 2016 compared to the prior year. Our results in 2016 also reflect the benefits of our Aventine acquisition and the successful integration of our Midwest assets as well as a number of initiatives that increased our production efficiencies, lowered our carbon score and strengthened our balance sheet.

Thus far in the first quarter of 2017, a period known for seasonally low demand, we have experienced better market conditions than in the prior two years at this time, although margins are compressed. Corn prices are favorable due to the record corn harvest, ethanol prices remain firm and gasoline prices are climbing, all of which creates a positive backdrop for improved margins.

Global demand for ethanol is growing 2-3% annually and we expect U.S. ethanol exports to continue growing year-over-year in 2017 as ethanol is increasingly blended in international markets to meet octane requirements and reduce emissions. Moreover, approximately 30 countries have renewable fuel standards or targets further supporting international demand for ethanol.

We also see continued support for the ethanol industry on the regulatory front. We believe the new administration will be supportive of policies such as the RFS that prioritize domestic sources of energy. Although currently on hold due to the new administration's suspension in new regulations, we expect effectiveness of the 2017 Renewable Volume Obligations by the end of March.

In addition, we anticipate E15 sales and distribution infrastructure will continue to grow in 2017, with the number of stations offering E15 fuel to double by the end of 2017, up from approximately 600 stations at the end of 2016. Overall, we see a supportive environment for ethanol and anticipate that we will perform well financially in 2017.

We continue to focus on implementing plant improvement projects to optimize our production, lower our carbon score and produce meaningful near-term returns.

We implemented an industrial scale membrane system at our Madera facility that separates water from ethanol during the plant's dehydration process. We are in the process of analyzing data from commercial operation of the membrane system and expect the system to increase operating efficiencies, lower our production costs and reduce the carbon intensity of ethanol produced at this facility. Also at our Madera facility, we are continuing to work toward installing a five megawatt solar photovoltaic power system, the first ever commercial solar power system installed at a U.S. ethanol facility, with the goal of beginning full-scale operations in early 2018. We expect the system to lower our carbon score and lower our utility costs by over $1.0 million per year, displacing up to one-third of the grid electricity currently used. These technologies are designed to increase operating efficiencies, lower production costs and reduce the carbon intensity of ethanol produced at our Madera facility, further driving premium pricing on ethanol produced at the facility.

We are also in the late stages of interconnecting our cogeneration system at our Stockton plant with Pacific Gas & Electric that will convert process waste gas and natural gas into electricity and steam, lowering air emissions and energy costs by up to $4.0 million per year. We expect to begin commercial operations of this system in the spring of 2017.

During the third quarter of 2016, we received the first ever approved registration from the EPA for producing cellulosic ethanol from corn fiber at our Stockton plant, qualifying this ethanol for special premiums over conventional ethanol. We are on track to produce over 1.0 million gallons of cellulosic ethanol at this facility annually and we continue to focus on fine-tuning our systems to maximize yields and production efficiencies. We also began generating high-value D3 RINs from the production of cellulosic ethanol at our Stockton plant.

Based on the success of this project, we intend to begin producing cellulosic ethanol at our Madera plant and expect to ultimately produce over 1.0 million gallons of cellulosic ethanol at this facility annually. Once commercial scale production is achieved, we expect cellulosic ethanol production from our Madera plant will increase earnings by over $2.0 million annually. We are working with the EPA to qualify this production for D3 RINs and we anticipate approval will occur near the time we expect to begin commercial operations in the second half of 2017.

We are also working with the California Air Resources Board to qualify our cellulosic production at both our Stockton and Madera facilities for additional carbon credits under California's Low Carbon Fuel Standard.

Our initial budget for capital projects in 2017 totals $46.0 million, including $16.0 million in previously announced projects such as the completion of our Stockton cogeneration system, production of cellulosic ethanol at our Madera facility and our solar project. The remaining $30.0 million represents projects directed at increasing yields, increasing production capacities or revenues, improving operations, extending the reliability of our plants and equipment, reducing our costs or lowering our carbon score. We intend to fund these projects through a combination of cash on hand and cash flow or, where appropriate, low-cost financing. We plan to adjust our capital budget based on prudent resource management and market conditions and evaluate and prioritize each new investment to optimize stockholder return.

Late in the fourth quarter of 2016, we entered into a series of agreements to refinance our term debt associated with our Midwest assets and improve our liquidity, reducing our total debt outstanding by more than $12.0 million and reducing our annual interest costs by over $8.0 million. As part of those efforts, we expanded our relationship with ACEC by agreeing to contribute our Aurora, Nebraska plant assets into a newly created entity into which ACEC contributed its grain elevator with 3.5 million bushels of storage capacity, loop track, related land and other assets. The transaction with ACEC was immediately accretive to our stockholders and we expect the arrangement to reduce operating costs by over $5.0 million annually. In addition, the new arrangement fully integrates our Aurora plants and the grain facilities into a more functional and better performing single facility, enabling us to optimize grain procurement; more efficiently manage grain transfers; offer storage, drying and merchandising to local farmers; and providing us with additional growth opportunities.

We intend to continue to leverage our diverse base of production and marketing assets to expand our share of the renewable fuels and ethanol co-product markets. We also intend to continue to evaluate and invest in plant improvement initiatives using innovative technologies that generate meaningful near-term returns by enhancing plant efficiencies, reduce our carbon score and increase our profitability. We are also focused on further strengthening our balance sheet and liquidity while maintaining strong cash flows.

2016 Financial Performance Summary

Summary

Our consolidated net sales increased by 36%, or $434 million, to $1,625 million for 2016 from $1,191 million for 2015. Our net income available to common stockholders improved by $20.2 million from a net loss of $20.1 million for 2015 to net income of $0.1 million for 2016.

Factors that contributed to our results of operations for 2016 include:

- *Net sales.* Our net sales for the period increased due to increases in both production and third-party gallons sold. Our production sales volume of ethanol increased 52% to 484 million gallons for 2016 from 319 million gallons for 2015 and our third-party sales volume increased 15% to 440 million gallons for 2016 from 382 million gallons for 2015. The increased production sales volume was primarily due a full year of production from our Midwest facilities, whereas in 2015, production from those facilities was included only since our acquisition of those facilities on July 1, 2015.

- *Gross margin.* Our gross margin increased to 3.2% for 2016 from 0.6% for 2015. The improvement in our gross margin was primarily the result of higher corn crush margins driven by lower corn costs compared to 2015.

- *Selling, general and administrative expenses*. Our selling, general and administrative expenses, or SG&A, increased by $4.9 million to $28.3 million for 2016, as compared to $23.4 million for 2015, primarily as a result of increased professional services costs related to financing efforts and legal matters. On a per gallon basis, however, our SG&A declined in 2016 compared to 2015.

- *Interest expense.* Our interest expense increased by $9.8 million to $22.4 million for 2016 from $12.6 million for 2015. This increase is primarily due to increased average debt balances from our assumption of term debt from the Aventine acquisition and increased debt discount amortization from our early payoff of the debt. In December 2016, we issued term and revolving debt with significantly lower interest rates, which should lower interest expense in future periods.

Sales and Margins

We generate sales by marketing all the ethanol produced by our ethanol plants, all the ethanol produced by two other ethanol producers in the Western United States and ethanol purchased from other third-party suppliers throughout the United States. We also market ethanol co-products, including WDG and DDGS, wet and dry corn gluten feed, condensed distillers soluble, corn gluten meal, corn germ, corn oil, distillers yeast and CO_2, for our ethanol plants.

Our profitability is highly dependent on various commodity prices, including the market prices of ethanol, corn and natural gas.

Our average ethanol sales price remained relatively flat at $1.67 per gallon in 2016 compared to $1.68 per gallon in 2015. Similarly, the average price of ethanol, as reported by the CBOT, remained flat at $1.51 per gallon for 2016 and 2015.

Our average cost of corn decreased by 9% to $3.90 per bushel for 2016 from $4.29 per bushel for 2015. This decrease outpaced the decline in the average price of corn as reported by the CBOT, contributing to our improved margins.

We have three principal methods of selling ethanol: as a merchant, as a producer and as an agent. See "—Critical Accounting Policies—Revenue Recognition" below.

When acting as a merchant or as a producer, we generally enter into sales contracts to ship ethanol to a customer's desired location. We support these sales contracts through purchase contracts with several third-party suppliers or through our own production. We manage the necessary logistics to deliver ethanol to our customers either directly from a third-party supplier or from our inventory via truck or rail. Our sales as a merchant or as a producer expose us to significant price risks resulting from potential fluctuations in the market price of ethanol and corn. Our exposure varies depending on the magnitude of our sales and purchase commitments compared to the magnitude of our existing inventory, as well as the pricing terms—such as market index or fixed pricing—of our contracts. We seek to mitigate our exposure to price risks by implementing appropriate risk management strategies.

When acting as an agent for third-party suppliers, we conduct back-to-back purchases and sales in which we match ethanol purchase and sale contracts of like quantities and delivery periods. When acting in this capacity, we receive a predetermined service fee and have little or no exposure to price risks resulting from potential fluctuations in the market price of ethanol. For these sales, we record the marketing fee as net sales.

We believe that our gross profit margins depend primarily on five key factors:

- the market price of ethanol, which we believe is impacted by the degree of competition in the ethanol market; the price of gasoline and related petroleum products; and government regulation, including government mandates;
- the market price of key production input commodities, including corn and natural gas;
- the market price of co-products;

- our ability to anticipate trends in the market price of ethanol, co-products, and key input commodities and implement appropriate risk management and opportunistic strategies; and

- the proportion of our sales of ethanol produced at our ethanol plants to our sales of ethanol produced by unrelated third-parties.

We seek to optimize our gross profit margins by anticipating the factors above and, when resources are available, implementing hedging transactions and taking other actions designed to limit risk and address these factors. For example, we may seek to decrease inventory levels in anticipation of declining ethanol prices and increase inventory levels in anticipation of rising ethanol prices. We may also seek to alter our proportion or timing, or both, of purchase and sales commitments. Furthermore, we may diversify our ethanol feedstock to lower our average costs and/or increase our ethanol sales prices from premiums for low-carbon intensity rated ethanol.

Our limited resources to act upon the anticipated factors described above and/or our inability to anticipate these factors or their relative importance, and adverse movements in the factors themselves, could result in declining or even negative gross profit margins over certain periods of time. Our ability to anticipate these factors or favorable movements in these factors may enable us to generate above-average gross profit margins. However, given the difficulty associated with successfully forecasting any of these factors, we are unable to estimate our future gross profit margins.

Results of Operations

Accounting for the Results of Aventine and PE Op Co.

We closed our acquisition of Aventine on July 1, 2015 and, as a result, our results of operations include Aventine's results of operations as of and for the year ended December 31, 2016 and only for the six months ended December 31, 2015. Further, since October 6, 2010, our consolidated financial statements have included the financial statements of PE Op Co., the holding company that owns the entities which own our plants located on the West Coast. As such, PE Op Co.'s financial statements in turn include the financial statements of those entities which own our plants located on the West Coast. On October 6, 2010, we purchased a 20% ownership interest in PE Op Co., which gave us the single largest equity position in PE Op Co. Based on our ownership interest as well as our asset management and marketing agreements with PE Op Co., we determined that, beginning on October 6, 2010, we were the primary beneficiary of PE Op Co., and as such, we consolidated PE Op Co.'s financial results with our financial results. We obtained full voting control of PE Op Co. on May 22, 2015 when we became the sole owner of PE Op Co., and as of December 31, 2015, we continued to hold a 100% ownership interest in PE Op Co.

Selected Financial Information

The following selected financial information should be read in conjunction with our consolidated financial statements and notes to our consolidated financial statements included elsewhere in this report, and the other sections of "Management's Discussion and Analysis of Financial Condition and Results of Operations" contained in this report.

Certain performance metrics that we believe are important indicators of our results of operations include:

	Years Ended December 31,			Percentage Change	
	2016	2015	2014	2016 vs 2015	2015 vs 2014
Production gallons sold (in millions)	484.1	319.2	183.5	51.7%	74.0%
Third-party gallons sold (in millions)	440.4	382.3	329.7	15.2%	16.0%
Total gallons sold (in millions)	924.5	701.5	513.2	31.8%	36.7%
Ethanol production capacity utilization	94%	89%	92%	5.6%	(3.3)%
Average sales price per gallon	$ 1.67	$ 1.68	$ 2.48	(0.6)%	(32.3)%
Corn cost per bushel—CBOT equivalent	$ 3.63	$ 3.77	$ 4.21	(3.7)%	(10.5)%
Average basis[1]	$ 0.27	$ 0.52	$ 1.24	(48.1)%	(58.1)%
Delivered cost of corn	$ 3.90	$ 4.29	$ 5.45	(9.1)%	(21.3)%
Total co-product tons sold (in thousands)	2,760.6	2,099.4	1,496.0	31.5%	40.3%
Co-product revenues as % of delivered cost of corn[2]	35.1%	35.8%	32.5%	(2.0)%	10.2%
Average CBOT ethanol price per gallon	$ 1.51	$ 1.51	$ 2.07	–%	(27.1)%
Average CBOT corn price per bushel	$ 3.58	$ 3.77	$ 4.16	(5.0)%	(9.4)%

(1) Corn basis represents the difference between the immediate cash price of delivered corn and the future price of corn for Chicago delivery.

(2) Co-product revenues as a percentage of delivered cost of corn shows our yield based on sales of co-products, including WDG and corn oil, generated from ethanol we produced.

Year Ended December 31, 2016 Compared to the Year Ended December 31, 2015

	Years Ended December 31,		Dollar Change Favorable (Unfavorable)	Percentage Change Favorable (Unfavorable)	Results as a Percentage of Net Sales for the Years Ended December 31,	
	2016	2015			2016	2015
	(dollars in thousands)					
Net sales	$ 1,624,758	$ 1,191,176	$ 433,582	36.4%	100.0%	100.0%
Cost of goods sold	1,572,926	1,183,766	389,160	32.9%	96.8%	99.4%
Gross profit	51,832	7,410	44,422	599.5%	3.2%	0.6%
Selling, general and administrative expenses	28,323	23,412	(4,911)	(21.0)%	1.7%	2.0%
Asset impairment	–	1,970	1,970	100.0%	–%	0.2%
Income (loss) from operations	23,509	(17,972)	41,481	NM	1.4%	(1.5)%
Fair value adjustments	(557)	1,641	(2,198)	NM	(0.0)%	0.1%
Interest expense, net	(22,406)	(12,594)	(9,812)	(77.9)%	(1.4)%	(1.1)%
Other income (expense), net	(1)	18	(19)	NM	(0.0)%	–%
Income (loss) before provision for income taxes	545	(28,907)	29,452	NM	0.0%	(2.4)%
Provision (benefit) for income taxes	(981)	(10,034)	(9,053)	(90.2)%	(0.1)%	(0.8)%
Consolidated net income (loss)	1,526	(18,873)	20,399	NM	0.1%	(1.6)%
Net (income) loss attributed to noncontrolling interests	(107)	87	(194)	NM	–%	–%
Net income (loss) attributed to Pacific Ethanol, Inc.	$ 1,419	$ (18,786)	$ 20,205	NM	0.1%	(1.6)%
Preferred stock dividends	(1,269)	(1,265)	(4)	(0.3)%	(0.1)%	(0.1)%
Income allocated to participating securities	(2)	–	(2)	NM	–%	–%
Income (loss) available to common stockholders	$ 148	$ (20,051)	$ 20,199	NM	0.0%	(1.7)%

Net Sales

The increase in our consolidated net sales for 2016 as compared to 2015 was primarily due to an increase in our total gallons sold.

We increased both production and third-party gallons sold, and our volume of co-products sold, for 2016 as compared to 2015. The increases in volumes of our production gallons and co-products sold are primarily due to additional volumes from our plants located in the Midwest, as well as third-party sales. In addition, we expanded our customer base and our sales to a larger national footprint with the addition of regions we cover with our Midwest plants.

Our average sales price per gallon remained relatively flat at $1.67 for 2016 compared to our average sales price per gallon of $1.68 for 2015. Similarly, the average CBOT ethanol price per gallon, remained flat at $1.51 for 2016 compared to 2015.

Production Segment

Net sales of ethanol from our production segment increased by $264.9 million, or 50%, to $792.6 million for 2016 as compared to $527.7 million for 2015. Our total volume of production ethanol gallons sold increased by 164.9 million gallons, or 52%, to 484.1 million gallons for 2016 as compared to 319.2 million gallons for 2015. At our production segment's average sales price per gallon of $1.62 for 2016, we generated $267.0 million in additional net sales from our production segment from the 164.9 million additional gallons of produced ethanol sold in 2016 as compared to 2015. The decline of $0.01, or 0.6%, in our production segment's average sales price per gallon in 2016 as compared to 2015 reduced our net sales from our production segment by $2.1 million.

Net sales of co-products increased $70.7 million, or 39%, to $253.2 million for 2016 as compared to $182.5 million for 2015. Our total volume of co-products sold increased by 0.7 million tons to 2.8 million tons for 2016 from 2.1 million tons for 2015. At our average sales price per ton of $91.74 for 2016, we generated $60.7 million in additional net sales from the 0.7 million additional tons of co-products sold in 2016 as compared to 2015. In addition, the increase of $4.82, or 5.5%, in our average sales price per ton in 2016 as compared to 2015 increased our net sales from our production segment by $10.1 million.

Marketing Segment

Net sales of ethanol from our marketing segment increased by $98.0 million, or 20%, to $579.0 million for 2016 as compared to $481.0 million for 2015.

Our total volume of ethanol gallons sold by our marketing segment increased by 223.0 million gallons, or 32%, to 924.5 million gallons for 2016 as compared to 701.5 million gallons for 2015. Our additional production gallons sold accounted for 164.9 million gallons of this increase, as noted above, and our additional third-party gallons sold accounted for 58.1 million gallons of this increase.

The increase in production gallons sold by our marketing segment contributed insignificantly to net sales generated by our marketing segment, resulting in an additional $2.6 million in net sales, which were eliminated upon consolidation.

At our marketing segment's average sales price per gallon of $1.72 for 2016, we generated $99.6 million in additional net sales from our marketing segment from the 58.1 million gallons in additional third-party ethanol sold in 2016 as compared to 2015. However, the decline of less than $0.01, or 0.3%, in our marketing segment's average sales price per gallon in 2016 as compared to 2015 reduced our net sales from third-party ethanol sold by our marketing segment by $1.6 million.

Cost of Goods Sold and Gross Profit

Our consolidated gross profit improved significantly to $51.8 million for 2016 from $7.4 million for 2015, representing a gross margin of 3.2% for 2016 compared to 0.6% for 2015. Our consolidated gross profit increased primarily due to a decline of $0.39 in our average delivered cost of corn per bushel in 2016 as compared to 2015.

Production Segment

Our production segment improved our consolidated gross profit by $41.0 million for 2016 as compared to 2015. Of this amount, $27.7 million is attributable to higher margins resulting primarily from our lower corn costs in 2016 as compared to 2015, and $13.3 million in higher gross profit is attributed to the 164.9 million gallon increase in production volumes sold in 2016 as compared to 2015.

Marketing Segment

Our marketing segment improved our consolidated gross profit by $1.5 million for 2016 as compared to 2015. Of this amount, $1.8 million is attributable to the 58.1 million gallon increase in third party marketing volumes in 2016 as compared to 2015, which was partially offset by $0.3 million in lower margins resulting primarily from our marketing segment's lower average sales price per gallon in 2016 as compared to 2015.

Selling, General and Administrative Expenses

Our SG&A increased $4.9 million to $28.3 million for 2016 as compared to $23.4 million for the same period in 2015. The increase in SG&A is due to increased professional fees relating to our litigation matters, our costs associated with our transaction with ACEC and refinancing efforts during 2016 and an increase in compensation costs.

Interest Expense

Interest expense, net increased by $9.8 million to $22.4 million for 2016 from $12.6 million for 2015. Increased interest expense is primarily related to a full year of debt inherited in the Aventine acquisition associated with our Midwest facilities as well as increased debt discount amortization resulting from our early payoff of the debt. In December 2016, we refinanced our outstanding plant debt with new term and revolving debt at interest rates much lower than the prior debt which should result in lower interest expense in future periods.

Provision (Benefit) for Income Taxes

In 2016, we generated taxable income, however, we were able to offset taxable income against net operating losses in prior years. Further, we revised our estimate of our valuation allowance related to prior alternative minimum tax credits, which relates to a change in the tax code during the year, resulting in a net tax benefit for 2016.

Net (Income) Loss Attributed to Noncontrolling Interests

Net (income) loss attributed to noncontrolling interests relates to our consolidated treatment of PE Op Co., which indirectly owns our plants located on the West Coast, and Pacific Aurora. In 2015, PE Op Co. was not wholly owned for the entire year, but was wholly owned at the end of 2015. In 2016, we consolidated the assets associated with Pacific Aurora before and after the admission of a 26% equity owner of Pacific Aurora. For these applicable periods, we reduced our consolidated net income (loss) for the noncontrolling interests, which were the ownership interests that we did not own.

Preferred Stock Dividends

Shares of our Series B Preferred Stock are entitled to quarterly cumulative dividends payable in arrears in an amount equal to 7% per annum of the purchase price per share of the Series B Preferred Stock. We accrued and paid in cash dividends of $1.3 million for each of 2016 and 2015 in respect of our Series B Preferred Stock.

Year Ended December 31, 2015 Compared to the Year Ended December 31, 2014

	Years Ended December 31,		Dollar Change Favorable (Unfavorable)	Percentage Change Favorable (Unfavorable)	Results as a Percentage of Net Sales for the Years Ended December 31,	
	2015	2014			2015	2014
	(dollars in thousands)					
Net sales	$ 1,191,176	$ 1,107,412	$ 83,764	7.6%	100.0%	100.0%
Cost of goods sold	1,183,766	998,927	(184,839)	(18.5)%	99.4%	90.2%
Gross profit	7,410	108,485	(101,075)	(93.2)%	0.6%	9.8%
Selling, general and administrative expenses	23,412	17,108	(6,304)	(36.8)%	2.0%	1.5%
Asset impairment	1,970	–	(1,970)	NM	0.2%	–%
Income (loss) from operations	(17,972)	91,377	(109,349)	NM	(1.5)%	8.3%
Fair value adjustments and warrant inducements	1,641	(37,532)	39,173	NM	0.1%	(3.4)%
Interest expense, net	(12,594)	(9,438)	(3,156)	(33.4)%	(1.1)%	(0.9)%
Loss on extinguishments of debt	–	(2,363)	2,363	100.0%	–%	(0.2)%
Other income (expense), net	18	(905)	923	NM	–%	(0.1)%
Income (loss) before provision for income taxes	(28,907)	41,139	(70,046)	NM	(2.4)%	3.7%
(Benefit) provision for income taxes	(10,034)	15,137	25,171	NM	(0.8)%	1.4%
Consolidated net income (loss)	(18,873)	26,002	(44,875)	NM	(1.6)%	2.3%
Net (income) loss attributed to noncontrolling interests	87	(4,713)	4,800	NM	–%	(0.4)%
Net income (loss) attributed to Pacific Ethanol, Inc.	$ (18,786)	$ 21,289	$ (40,075)	NM	(1.6)%	1.9%
Preferred stock dividends	(1,265)	(1,265)	–	–%	(0.1)%	(0.1)%
Income allocated to participating securities	–	(585)	585	100%	–%	(0.0)%
Income (loss) available to common stockholders	$ (20,051)	$ 19,439	$ (39,490)	NM	(1.7)%	1.8%

Net Sales

The increase in our consolidated net sales for 2015 as compared to 2014 was primarily due to an increase in our total gallons sold, which was partially offset by a decline in our average sales price per gallon.

We increased both production and third-party gallons sold, and our volume of co-products sold, for 2015 as compared to 2014. The increases in volumes of our production gallons and co-products sold are primarily due to additional volumes from our plants located in the Midwest, and, to a lesser extent, third-party supplier plants. In addition, we expanded our customer base and our sales to a larger national footprint with the addition of regions we cover with our Midwest plants.

Our average sales price per gallon decreased 32.3% to $1.68 for 2015 compared to our average sales price per gallon of $2.48 for 2014. Similarly, the average CBOT ethanol price per gallon, declined 27.1% to $1.51 for 2015 compared to an average CBOT sales price per gallon of $2.07 for 2014.

Production Segment

Net sales of ethanol from our production segment increased by $77.3 million, or 17%, to $527.7 million for 2015 as compared to $450.4 million for 2014. Our total volume of production ethanol gallons sold increased by 135.7 million gallons, or 74%, to 319.2 million gallons for 2015 as compared to 183.5 million gallons for 2014. Of the additional 135.7 million gallons of ethanol sold in 2015, an aggregate of 134.6 million gallons were attributable to production at our Midwestern plants which we acquired on July 1, 2015. At our production segment's average sales price per gallon of $1.63 for 2015, we generated $221.2 million in additional net sales from our production segment from the 135.7 million additional gallons of produced ethanol sold in 2015 as compared to 2014. The decline of $0.78, or 32.4%, in our production segment's average sales price per gallon in 2015 as compared to 2014 reduced our net sales from our production segment by $143.9 million.

Net sales of co-products increased $70.6 million, or 63%, to $182.5 million for 2015 as compared to $111.9 million for 2014. Our total volume of co-products sold increased by 0.6 million tons to 2.1 million tons for 2015 from 1.5 million tons for 2014. At our production segment's average sales price per ton of $86.92 for 2015, we generated $52.4 million in additional net sales from the 0.6 million additional tons of co-products sold in 2015 as compared to 2014. In addition, the increase of $12.10, or 16.2%, in our average sales price per ton in 2015 as compared to 2014 increased in our net sales from our production segment by $18.2 million.

Marketing Segment

Net sales of ethanol from our marketing segment decreased by $64.0 million, or 12%, to $481.0 million for 2015 as compared to $545.0 million for 2014.

Our total volume of ethanol gallons sold by our marketing segment increased by 188.3 million gallons, or 37%, to 701.5 million gallons for 2015 as compared to 513.2 million gallons for 2014. Our additional production gallons sold accounted for 135.7 million gallons of this increase, as noted above, and our additional third-party gallons sold accounted for 52.6 million gallons of this increase.

The increase in production gallons sold by our marketing segment contributed insignificantly to net sales generated by our marketing segment, resulting in an additional $1.3 million in net sales, which were eliminated upon consolidation.

At our marketing segment's average sales price per gallon of $1.72 for 2015, we generated $90.5 million in additional net sales from our marketing segment from the 52.6 million gallons in additional third-party ethanol sold in 2015 as compared to 2014. However, the decline of $0.47, or 21.4%, in our marketing segment's average sales price per gallon in 2015 as compared to 2014 reduced our net sales from third-party ethanol sold by our marketing segment by $154.5 million.

Cost of Goods Sold and Gross Profit

Our consolidated gross profit declined significantly to $7.4 million for 2015 from a record $108.5 million for 2014, representing a gross margin of 0.6% for 2015 compared to 9.8% for 2014. Our consolidated gross profit decreased primarily due to a decline of $0.80 in our average sales price per gallon in 2015 as compared to 2014.

Production Segment

Our production segment reduced our consolidated gross profit by $98.4 million for 2015 as compared to 2014. Of this amount, $94.3 million is attributable to lower margins resulting primarily from our production segment's lower average sales price per gallon in 2015 as compared to 2014, and $4.1 million in lower gross profit is attributed to the 135.7 million gallon increase in production volumes sold in 2015 as compared to 2014.

Marketing Segment

Our marketing segment reduced our consolidated gross profit by $3.4 million for 2015 as compared to 2014. Of this amount, $4.4 million is attributable to lower margins resulting primarily from our marketing segment's lower average sales price per gallon in 2015 as compared to 2014, which was partially offset by $1.0 million in additional gross profit from the 188.3 million gallon increase in marketing volumes in 2015 as compared to 2014.

Selling, General and Administrative Expenses

Our SG&A increased $6.3 million to $23.4 million for 2015 as compared to $17.1 million for the same period in 2014. The increase in SG&A is primarily due to our Midwest operations. On a per gallon basis, however, our SG&A declined in 2015 as compared to 2014.

Asset Impairment

We recorded an asset impairment charge of $2.0 million for the year ended December 31, 2015 related to our abandonment of certain accounting and information technology systems in connection with our integration of Aventine. We did not record any asset impairment for the year ended December 31, 2014.

Fair Value Adjustments and Warrant Inducements

We issued warrants in various financing transactions from 2010 through 2013. These warrants were initially recorded at fair value and are adjusted quarterly. As a result of quarterly fair value adjustments and warrant inducements, we recorded income of $1.6 million for 2015 and an expense of $37.5 million for 2014.

These changes in fair value are primarily due to the volatility in the market price of our common stock from period to period. The substantial change in fair value for 2014 occurred because the exercise prices of our warrants were well below the market price of our common stock throughout the year, most notably at March 31, 2014. At December 31, 2013, the market price of our common stock was $5.09 per share and our outstanding warrants had a weighted-average exercise price of $7.27 per share. At March 31, 2014, the market price of our common stock had increased to $15.58 per share, and our outstanding warrants were in-the-money and had significant intrinsic value. At December 31, 2014, the market price of our common stock had declined slightly from the prior quarter to $10.33.

These fair value adjustments will continue in future periods until all of our warrants are exercised or expire. These adjustments will generally reduce our net income or increase our net loss if the market price of our common stock increases from the prior quarter through the date of a warrant's exercise, if exercised during the quarter, or if our common stock increases on a quarter over quarter basis for warrants outstanding at the end of a quarter. Conversely, the adjustments will generally increase our net income or reduce our net loss if the market price of our common stock declines in these scenarios.

We paid an aggregate of $2.3 million in cash to certain warrant holders as inducements to exercise their warrants in 2014. No such payments were made in 2015.

Interest Expense

Interest expense, net increased by $3.2 million to $12.6 million for 2015 from $9.4 million for 2014. Interest expense is primarily related to our debt associated with our production segment. The increase in interest expense, net for 2015 is primarily related to our increased term debt outstanding due to Aventine's $145.6 million in term debt.

Loss on Extinguishments of Debt

We extinguished certain PE Op Co. debt in 2014 by paying $2.4 million in cash in excess of the amount of the debt, and as such, recorded a loss on extinguishments of debt. We retired a total of $70.8 million in debt during 2014, eliminating all parent level debt and reducing our consolidated third-party debt at the plant level to $17.0 million as of December 31, 2014. No such debt extinguishments were made in 2015.

Provision (Benefit) for Income Taxes

In 2015, we generated losses, which are able to be carried back to offset prior year's income subject to income tax, resulting in a tax benefit. As a result, this increased our income tax receivable to $10.7 million, which we expect to receive in 2016. In addition, in 2015, we recognized a $1.5 million tax benefit related to adjustments to our tax asset valuation allowance from a prior period.

Preferred Stock Dividends

Shares of our Series B Preferred Stock are entitled to quarterly cumulative dividends payable in arrears in an amount equal to 7% per annum of the purchase price per share of the Series B Preferred Stock. We accrued and paid in cash dividends of $1.3 million for each of 2015 and 2014 in respect of our Series B Preferred Stock.

Liquidity and Capital Resources

During 2016, we funded our operations primarily from cash on hand, cash generated from our operations, proceeds from new credit facilities and advances from our revolving credit facilities. These funds were also used to repay our term debt prior to maturity, make capital expenditures, make payments on our capital leases and pay dividends in respect of our Series B Preferred Stock.

Our current available capital resources consist of cash on hand and amounts available for borrowing under our credit facilities. We expect that our future available capital resources will consist primarily of our remaining cash balances, amounts available for borrowing, if any, under our credit facilities, cash generated from operations and proceeds from any warrant exercises.

We believe that current and future available capital resources, revenues generated from operations, and other existing sources of liquidity, including our credit facilities, will be adequate to meet our anticipated capital requirements for at least the next twelve months.

Quantitative Year-End Liquidity Status

We believe that the following amounts provide insight into our liquidity and capital resources. The following selected financial information should be read in conjunction with our consolidated financial statements and notes to consolidated financial statements included elsewhere in this report, and the other sections of "Management's Discussion and Analysis of Financial Condition and Results of Operations" contained in this report (dollars in thousands).

	December 31, 2016	December 31, 2015
Cash and cash equivalents	$ 68,590	$ 52,712
Current assets	$ 235,201	$ 197,942
Property and equipment, net	$ 465,190	$ 464,960
Current liabilities	$ 78,841	$ 72,909
Long-term debt, noncurrent portion	$ 188,028	$ 203,861
Working capital	$ 156,360	$ 125,033
Working capital ratio	2.98	2.71

Restricted Net Assets

At December 31, 2016, we had approximately $287.2 million of net assets at our subsidiaries that were not available to be transferred to Pacific Ethanol, Inc. in the form of dividends, distributions, loans or advances due to restrictions contained in the credit facilities of these subsidiaries.

Changes in Working Capital and Cash Flows

Working capital increased to $156.4 million at December 31, 2016 from $125.0 million at December 31, 2015 as a result of an increase of $37.3 million in current assets, partially offset by an increase of $5.9 million in current liabilities.

Current assets increased primarily due to an increase of $15.9 million in cash, $24.9 million in accounts receivable, $4.0 million in prepaid inventory, partially offset by a decrease of $4.9 million in income tax receivables and $1.1 million in derivative assets.

Our cash and cash equivalents increased by $15.9 million at December 31, 2016 as compared to December 31, 2015 due to $40.4 million of cash generated from our operations, partially offset by $14.6 million of cash used in investing activities and $9.9 million of cash used in our financing activities, as discussed below.

Our current liabilities increased by $5.9 million at December 31, 2016 as compared to December 31, 2015 primarily due to an increase of $16.7 million in accounts payable and accrued liabilities and $2.3 million in derivative liabilities. These increases were partially offset by decreases of $10.0 million in current debt and capital leases and $3.1 million in other current liabilities.

Cash provided by or used in our Operating Activities

Cash provided by our operating activities increased by $67.2 million in 2016 as compared to 2015. We generated $40.4 million of cash in our operating activities in 2016. The improvement in cash provided by our operating activities is primarily due to higher net income from higher operating margins. Additional factors that contributed to the improvement in cash provided by our operating activities include:

- an increase in accounts payable and accrued expenses of $19.3 million due to the timing of payments and higher sales volumes;
- an increase in depreciation and amortization of $11.8 million due to additional assets from our Aventine acquisition;
- interest expense added to plant term debt of $9.5 million due to higher debt levels resulting from our Aventine acquisition; and
- a decrease in prepaid and other assets of $6.3 million due to collection of income tax refunds.

These amounts were partially offset by:

- an increase in accounts receivable of $9.3 million primarily due to higher sales volumes and
- an increase in prepaid inventory of $9.6 million also due to higher sales volumes.

Cash used in our Investing Activities

Cash used in our investing activities increased by $8.3 million in 2016 as compared to 2015. We used $14.6 million of cash in our investing activities in 2016. The increase in cash used in our investing activities is primarily due to $18.8 million of net cash from our acquisition of Aventine in the prior year, partially offset by $4.6 million of proceeds from cash collateralized letters of credit and a decrease of $1.3 million in capital expenditures.

Cash provided by or used in our Financing Activities

Cash provided by our financing activities declined by $33.7 million in 2016 as compared to 2015. We used $9.9 million of cash in our financing activities in 2016. The decrease in cash used in our financing activities is primarily due to the following activities:

- cash proceeds of $30.0 million from the sale of a portion of our equity interest in Pacific Aurora;
- an increase of $158.2 million in payments to retire certain plant term debt in connection with our debt refinancing transaction; and
- an increase of $2.0 million in payments on capital leases.

These amounts were partially offset by:

- an increase of $152.4 million in proceeds from credit agreements and assessment financing, primarily in connection with our debt refinancing transaction; and
- an increase of $0.8 million in proceeds from warrant exercises.

Kinergy Operating Line of Credit

Kinergy maintains an operating line of credit for an aggregate amount of up to $85.0 million, with an accordion feature to further increase the amount to up to $100.0 million. The credit facility expires on December 31, 2020. Interest accrues under the credit facility at a rate equal to (i) the three-month London Interbank Offered Rate ("LIBOR"), plus (ii) a specified applicable margin ranging from 1.75% to 2.75%. The credit facility's monthly unused line fee is 0.25% to 0.375% of the amount by which the maximum credit under the facility exceeds the average daily principal balance during the immediately preceding month. Payments that may be made by Kinergy to Pacific Ethanol as reimbursement for management and other services provided by Pacific Ethanol to Kinergy are limited under the terms of the credit facility to $1.5 million per fiscal quarter. The credit facility also includes the accounts receivable of Pacific Ag. Products, LLC, or PAP, as additional collateral. Payments that may be made by PAP to Pacific Ethanol as reimbursement for management and other services provided by Pacific Ethanol to PAP are limited under the terms of the credit facility to $0.5 million per fiscal quarter. PAP, one of our indirect wholly-owned subsidiaries, markets our co-products and also provides raw material procurement services to our subsidiaries.

For all monthly periods in which excess borrowing availability falls below a specified level, Kinergy and PAP must collectively maintain a fixed-charge coverage ratio (calculated as a twelve-month rolling earnings before interest, taxes, depreciation and amortization (EBITDA) divided by the sum of interest expense, capital expenditures, principal payments of indebtedness, indebtedness from capital leases and taxes paid during such twelve-month rolling period) of at least 2.0 and are prohibited from incurring certain additional indebtedness (other than specific intercompany indebtedness). Kinergy's and PAP's obligations under the credit facility are secured by a first-priority security interest in all of their assets in favor of the lender. Kinergy and PAP believe they are in compliance with this covenant. The following table summarizes Kinergy's financial covenants and actual results for the periods presented (dollars in thousands):

	Years Ended December 31,	
	2016	2015
Fixed Charge Coverage Ratio Requirement	2.00	2.00
Actual	7.88	10.02
Excess	5.88	8.02

Pacific Ethanol has guaranteed all of Kinergy's obligations under the credit facility. As of December 31, 2016, Kinergy had an outstanding balance of $49.9 million and an unused availability under the credit facility of $33.5 million.

Pekin Credit Facilities

On December 15, 2016, our wholly-owned subsidiary, Pacific Ethanol Pekin, Inc., or Pekin, entered into term and revolving credit facilities. Pekin borrowed $64.0 million under a term loan facility that matures on August 20, 2021 and $32.0 million under a revolving credit facility that matures on February 1, 2022. The Pekin credit facilities are secured by a first-priority security interest in all of Pekin's assets. Interest accrues under the Pekin credit facilities at an annual rate equal to the 30-day LIBOR plus 3.75%, payable monthly. Pekin is required to make quarterly principal payments in the amount of $3.5 million on the term loan beginning on May 20, 2017 and a principal payment of $4.5 million at maturity on August 20, 2021. Pekin is required to pay monthly in arrears a fee on any unused portion of the revolving credit facility at a rate of 0.75% per annum. Prepayment of these facilities is subject to a prepayment penalty. Under the terms of the credit facilities, Pekin is required to maintain not less than $20.0 million in working capital and an annual debt coverage ratio of not less than 1.25 to 1.0.

Pacific Aurora Credit Facility

On December 15, 2016, Pacific Aurora entered into a revolving credit facility for up to $30.0 million that matures on February 1, 2022. The credit facility is secured by a first-priority security interest in all of Pacific Aurora's assets. Borrowing availability under the credit facility automatically declines by $2.5 million on the first day of each June and December beginning on June 1, 2017 through and including December 1, 2020. Interest accrues under the Pacific Aurora credit facility at an annual rate equal to the 30-day LIBOR plus 4.0%, payable monthly. Pacific Aurora is required to pay monthly in arrears a fee on any unused portion of the credit facility at a rate of 0.75% per annum. Prepayment of the credit facility is subject to a prepayment penalty. Under the terms of the credit facility, Pacific Aurora is required to maintain not less than $22.5 million in working capital through June 30, 2017, not less than $24.0 million in working capital after June 30, 2017 and an annual debt coverage ratio of not less than 1.5 to 1.0. At December 31, 2016, Pacific Aurora had $1.0 million outstanding under the credit facility and $29.0 million available for borrowing under the facility.

Pacific Ethanol, Inc. Notes Payable

On December 12, 2016, we entered into a Note Purchase Agreement with five accredited investors. On December 15, 2016, under the terms of the Note Purchase Agreement, we sold $55.0 million in aggregate principal amount of our senior secured notes to the investors in a private offering for aggregate gross proceeds of 97% of the principal amount of the notes sold. The notes mature on December 15, 2019. Interest on the notes accrues at an annual rate equal to (i) the greater of 1% and the three-month LIBOR, plus 7.0% from the closing through December 14, 2017, (ii) the greater of 1% and LIBOR, plus 9% between December 15, 2017 and December 14, 2018, and (iii) the greater of 1% and LIBOR plus 11% between December 15, 2018 and the maturity date. The interest rate increases by an additional 2% per annum above the interest rate otherwise applicable upon the occurrence and during the continuance of an event of default until cured. Interest is payable in cash in arrears on the 15th calendar day of each March, June, September and December beginning on March 15, 2017. We are required to pay all outstanding principal and any accrued and unpaid interest on the notes on the maturity date. We may, at our option, prepay the outstanding principal amount of the notes at any time without premium or penalty. Pacific Ethanol, Inc. issued the notes, which are secured by a first-priority security interest in the equity interest held by Pacific Ethanol, Inc. in its wholly-owned subsidiary, PE Op. Co., which indirectly owns our plants located on the West Coast.

Effects of Inflation

The impact of inflation was not significant to our financial condition or results of operations for 2016, 2015 or 2014.

Contractual Obligations

The following table outlines payments due under our significant contractual obligations (in thousands):

Contractual Obligations At December 31, 2016	2017	2018	2019	2020	2021	Thereafter	Total
Sourcing commitments[1]	$ 33,147	$ –	$ –	$ –	$ –	$ –	$ 33,147
Debt principal	10,500	14,000	69,000	63,862	11,500	33,000	201,862
Debt interest[2]	10,198	10,644	10,435	3,717	3,069	1,497	39,560
Capital projects	15,710	–	–	–	–	–	15,710
Operating leases[3]	14,011	11,822	8,929	4,942	1,991	2,812	44,507
Capital leases[3]	930	588	–	–	–	–	1,518
Preferred dividends[4]	1,265	1,265	1,265	1,265	1,265	1,265	7,590
Total commitments	$ 85,761	$ 38,319	$ 89,629	$ 73,786	$ 17,825	$ 38,574	$ 343,894

(1) Unconditional purchase commitments for production materials incurred in the normal course of business.
(2) Payments based on interest rates and balances as of December 31, 2016 through maturity.
(3) Future minimum payments under capital and non-cancelable operating leases.
(4) Represents dividends on 926,942 shares of Series B Preferred Stock. Dividends accrue until Series B Preferred Stock is converted to common stock or redeemed. The "thereafter" amount includes only one additional year of dividends.

The above table outlines our obligations as of December 31, 2016 and does not reflect the changes in our obligations that occurred after that date.

Critical Accounting Policies

Our discussion and analysis of our financial condition and results of operations is based upon our consolidated financial statements, which have been prepared in accordance with accounting principles generally accepted in the United States of America. The preparation of these financial statements requires us to make estimates and judgments that affect the reported amounts of assets and liabilities and disclosure of contingent assets and liabilities at the date of the financial statements and the reported amount of net sales and expenses for each period. The following represents a summary of our critical accounting policies, defined as those policies that we believe are the most important to the portrayal of our financial condition and results of operations and that require management's most difficult, subjective or complex judgments, often as a result of the need to make estimates about the effects of matters that are inherently uncertain.

Revenue Recognition

We recognize revenue when it is realized or realizable and earned. We consider revenue realized or realizable and earned when there is persuasive evidence of an arrangement, delivery has occurred, the sales price is fixed or determinable, and collection is reasonably assured. We derive revenue primarily from sales of ethanol and related co-products. We recognize revenue when title transfers to our customers, which is generally upon the delivery of these products to a customer's designated location. These deliveries are made in accordance with sales commitments and related sales orders entered into with customers either verbally or in written form. The sales commitments and related sales orders provide quantities, pricing and conditions of sales. In this regard, we engage in three basic types of revenue generating transactions:

- *As a producer*. Sales as a producer consist of sales of our inventory produced at our ethanol production facilities.
- *As a merchant.* Sales as a merchant consist of sales to customers through purchases from third-party suppliers in which we may or may not obtain physical control of the ethanol or co-products in which shipments are directed from our suppliers to our terminals or direct to our customers but for which we accept the risk of loss in the transactions.
- *As an agent*. Sales as an agent consist of sales to customers through purchases from third-party suppliers in which the risks and rewards of inventory ownership remain with third-party suppliers and we receive a predetermined service fee under these transactions.

The following table shows our net sales generated as a producer, a merchant and as an agent for the years presented (in thousands):

	For the Years Ended December 31,		
	2016	2015	2014
Producer	$ 1,045,807	$ 710,114	$ 562,281
Merchant	577,347	479,551	543,222
Agent	1,604	1,511	1,909
	$ 1,624,758	$ 1,191,176	$ 1,107,412

Revenue from sales of third-party ethanol and its co-products is recorded net of costs when we are acting as an agent between a customer and a supplier and gross when we are a principal to the transaction. Several factors are considered to determine whether we are acting as an agent or principal, most notably whether we are the primary obligor to the customer, whether we have inventory risk and related risk of loss or whether we add meaningful value to the supplier's product or service. Consideration is also given to whether we have latitude in establishing the sales price or have credit risk, or both. When we act as an agent, we record revenues on a net basis, or our predetermined fees and any associated freight, based upon the amount of net revenues retained in excess of amounts paid to suppliers.

We record revenues based upon the gross amounts billed to our customers in transactions where we act as a producer or a merchant and obtain title to ethanol and its co-products and therefore own the product and any related unmitigated inventory risk for the ethanol, regardless of whether we actually obtain physical control of the product.

Warrants at Fair Value

We have recorded our warrants issued since 2010 at fair value. We believe the valuation of these warrants is a critical accounting estimate because valuation estimates obtained from third parties involve inputs other than quoted prices to value the warrants. Changes in these estimates, and in particular, certain of the inputs to the valuation estimates, can be volatile from period to period and may markedly impact the total mark-to-market valuation of the warrants recorded as fair value adjustments in our consolidated statements of operations. We recorded expenses from fair value adjustments and warrant inducements of $0.6 million and $37.5 million for the years ended December 31, 2016 and 2014, respectively, and income from fair value adjustments and warrant inducements of $1.6 million for the year ended December 31, 2015.

Impairment of Long-Lived Assets

Our long-lived assets have been primarily associated with our ethanol production facilities, reflecting their original cost, adjusted for depreciation and any subsequent impairment.

We assess the impairment of long-lived assets, including property and equipment, when events or changes in circumstances indicate that the fair value of an asset could be less than the net book value of the asset. Generally, we assess long-lived assets for impairment by first determining the forecasted, undiscounted cash flows each asset is expected to generate plus the net proceeds expected from the sale of the asset. If the amount of proceeds is less than the carrying value of the asset, we then determine the fair value of the asset. An impairment loss would be recognized when the fair value is less than the related net book value, and an impairment expense would be recorded in the amount of the difference. Forecasts of future cash flows are judgments based on our experience and knowledge of our operations and the industry in which we operate. These forecasts could be significantly affected by future changes in market conditions, the economic environment, including inflation, and the purchasing decisions of our customers.

We review our intangible assets with indefinite lives at least annually or more frequently if impairment indicators arise. In our review, we determine the fair value of these assets using market multiples and discounted cash flow modeling and compare it to the net book value of the acquired assets.

In 2015, we recorded an impairment charge of $2.0 million on our long-lived assets related to the abandonment of certain accounting and information technology systems following our integration of Aventine. We did not recognize any asset impairment charges in 2016 and 2014.

Valuation Allowance for Deferred Taxes

We account for income taxes under the asset and liability approach, where deferred tax assets and liabilities are determined based on differences between financial reporting and tax bases of assets and liabilities, and are measured using enacted tax rates and laws that are expected to be in effect when the differences reverse. Valuation allowances are established when necessary to reduce deferred tax assets to the amounts expected to be realized.

We evaluate our deferred tax asset balance for realizability. To the extent we believe it is more likely than not that some portion or all of our deferred tax assets will not be realized, we will establish a valuation allowance against the deferred tax assets. Realization of our deferred tax assets is dependent upon future taxable income during the periods in which the associated temporary differences become deductible. We consider the scheduled reversal of deferred tax liabilities, projected future taxable income and tax planning strategies in making this assessment. These changes, if any, may require possible material adjustments to these deferred tax assets, resulting in a reduction in net income or an increase in net loss in the period when such determinations are made.

Our pre-tax consolidated income was $0.5 million, compared to a loss of $28.9 million and income of $41.1 million for the years ended December 31, 2016, 2015 and 2014, respectively. In 2014, we experienced unprecedented profit margins following a history of losses in the years prior to 2014. Therefore, based on recent activity, we do not have significant evidence to support a conclusion that we will more likely than not be able to benefit from our deferred tax assets. As such, we have recorded a valuation allowance against our deferred tax assets.

Derivative Instruments

We evaluate our contracts to determine whether the contracts are derivative instruments. Management may elect to exempt certain forward contracts that meet the definition of a derivative from derivative accounting as normal purchases or normal sales. Normal purchases and normal sales are contracts that provide for the purchase or sale of something other than a financial instrument or derivative instrument that will be delivered in quantities expected to be used or sold over a reasonable period in the normal course of business. Contracts that meet the requirements of normal purchases or sales are documented as normal and exempted from the fair value accounting and reporting requirements of derivative accounting.

We enter into short-term cash, option and futures contracts as a means of securing purchases of corn, natural gas and sales of ethanol and managing exposure to changes in commodity prices. All of our exchange-traded derivatives are designated as non-hedge derivatives for accounting purposes, with changes in fair value recognized in net income. Although the contracts are economic hedges of specified risks, they are not designated as and accounted for as hedging instruments.

Realized and unrealized gains and losses related to exchange-traded derivative contracts are included as a component of cost of goods sold in the accompanying financial statements. The fair values of contracts entered through commodity exchanges are presented on the accompanying balance sheet as derivative instruments. The selection of normal purchase or sales contracts, and use of hedge accounting, are accounting policies that can change the timing of recognition of gains and losses in the statement of operations.

Accounting for Business Combinations

Determining the fair value of assets acquired and liabilities assumed in a business combination is considered a critical accounting estimate because the allocation of the purchase price to assets acquired and liabilities assumed based upon fair values requires significant management judgment and the use of subjective measurements. Variability in industry conditions and changes in assumptions or subjective measurements used to allocate fair value are reasonably possible and may have a material impact on our financial position, liquidity or results of operations.

Allowance for Doubtful Accounts

We sell ethanol primarily to gasoline refining and distribution companies, sell corn oil to poultry and biodiesel customers and sell other co-products to dairy operators and animal feed distributors. We had significant concentrations of credit risk from sales of our ethanol as of December 31, 2016 and 2015, as described in Note 1 to our consolidated financial statements included elsewhere in this report. However, historically, those ethanol customers have had good credit ratings and we have collected the amounts billed to those customers. Receivables from customers are generally unsecured. We continuously monitor our customer account balances and actively pursue collections on past due balances.

We maintain an allowance for doubtful accounts for balances that appear to have specific collection issues. Our collection process is based on the age of the invoice and requires attempted contacts with the customer at specified intervals. If after a specified number of days, we have been unsuccessful in our collection efforts, we consider recording a bad debt allowance for the balance in question. We would eventually write-off accounts included in our allowance when we have determined that collection is not likely. The factors considered in reaching this determination are the apparent financial condition of the customer, and our success in contacting and negotiating with the customer.

We recognized a bad debt expense of $0.3 million and bad debt recoveries of $0.4 million and less than $0.1 million for the years ended December 31, 2016, 2015 and 2014, respectively.

Impact of New Accounting Pronouncements

See "Note 1 – Organization and Significant Accounting Policies – Recent Accounting Pronouncements" of the Notes to Consolidated Financial Statements commencing on page F-12 of this report.

Item 7A. Quantitative and Qualitative Disclosures About Market Risk.

We are exposed to various market risks, including changes in commodity prices and interest rates as discussed below. Market risk is the potential loss arising from adverse changes in market rates and prices. In the ordinary course of business, we may enter into various types of transactions involving financial instruments to manage and reduce the impact of changes in commodity prices and interest rates. We do not expect to have any exposure to foreign currency risk as we conduct all of our transactions in U.S. dollars.

Commodity Risk

We produce ethanol and ethanol co-products. Our business is sensitive to changes in the prices of ethanol and corn. In the ordinary course of business, we may enter into various types of transactions involving financial instruments to manage and reduce the impact of changes in ethanol and corn prices. We do not enter into derivatives or other financial instruments for trading or speculative purposes.

We are subject to market risk with respect to ethanol pricing. Ethanol prices are sensitive to global and domestic ethanol supply; crude-oil supply and demand; crude-oil refining capacity; carbon intensity; government regulation; and consumer demand for alternative fuels. Our ethanol sales are priced using contracts that are either based on a fixed price or an indexed price tied to a specific market, such as the CBOT or the Oil Price Information Service. Under these fixed-priced arrangements, we are exposed to risk of a decrease in the market price of ethanol between the time the price is fixed and the time the ethanol is sold.

We satisfy our physical corn needs, the principal raw material used to produce ethanol and ethanol co-products, based on supply-guaranteed contracts with our vendors. Generally, we determine the purchase price of our corn at the time we begin to grind that day's needs. Sometimes we may also enter into contracts with our vendors to fix a portion of the purchase price. As such, we are also subject to market risk with respect to the price of corn. The price of corn is subject to wide fluctuations due to unpredictable factors such as weather conditions, farmer planting decisions, governmental policies with respect to agriculture and international trade and global supply and demand. Under the fixed price arrangements, we assume the risk of a decrease in the market price of corn between the time the price is fixed and the time the corn is utilized.

Ethanol co-products are sensitive to various demand factors such as numbers of livestock on feed, prices for feed alternatives and supply factors, primarily production of ethanol co-products by ethanol plants and other sources.

As noted above, we may attempt to reduce the market risk associated with fluctuations in the price of ethanol or corn by employing a variety of risk management and hedging strategies. Strategies include the use of derivative financial instruments such as futures and options executed on the CBOT and/or the New York Mercantile Exchange, as well as the daily management of physical corn.

These derivatives are not designated for special hedge accounting treatment, and as such, the changes in the fair values of these contracts are recorded on the balance sheet and recognized immediately in cost of goods sold. We recognized income of $1.4 million and losses of $0.3 million and $1.1 million related to settled non-designated hedges as the change in the fair values of these contracts for the years ended December 31, 2016, 2015 and 2014, respectively.

At December 31, 2016, we prepared a sensitivity analysis to estimate our exposure to ethanol and corn. Market risk related to these factors was estimated as the potential change in pre-tax income resulting from a hypothetical 10% adverse change in the prices of our expected ethanol and corn volumes. The results of this analysis as of December 31, 2016, which may differ materially from actual results, are as follows (in millions):

Commodity	Year Ending December 31, 2016 Volume	Unit of Measure	Approximate Adverse Change to Pre-Tax Income
Ethanol	924.50	Gallons	$ 81.3
Corn	172.9	Bushels	$ 62.8

Interest Rate Risk

We are exposed to market risk from changes in interest rates. Exposure to interest rate risk results primarily from our indebtedness that bears interest at variable rates. At December 31, 2016, $201.9 million of our long-term debt was variable-rate in nature. Based on a 100 basis point (1.00%) increase in the interest rate on our long-term debt, on an annualized basis, our pre-tax income for the year ended December 31, 2016 would have been negatively impacted by approximately $2.0 million.

Item 8. Financial Statements and Supplementary Data.

Reference is made to the financial statements, which begin at page F-1 of this report.

Item 9. Changes in and Disagreements with Accountants on Accounting and Financial Disclosure.

None.

Item 9A. Controls and Procedures.

We conducted an evaluation under the supervision and with the participation of our management, including our Chief Executive Officer and Chief Financial Officer, of the effectiveness of the design and operation of our disclosure controls and procedures. The term "disclosure controls and procedures," as defined in Rules 13a-15(e) and 15d-15(e) under the Securities and Exchange Act of 1934, as amended, or Exchange Act, means controls and other procedures of a company that are designed to ensure that information required to be disclosed by the company in the reports it files or submits under the Exchange Act is recorded, processed, summarized and reported, within the time periods specified in the Securities and Exchange Commission's rules and forms. Disclosure controls and procedures also include, without limitation, controls and procedures designed to ensure that information required to be disclosed by a company in the reports that it files or submits under the Exchange Act is accumulated and communicated to the company's management, including its principal executive and principal financial officers, or persons performing similar functions, as appropriate, to allow timely decisions regarding required disclosure. Based on this evaluation, our Chief Executive Officer and Chief Financial Officer concluded as of December 31, 2016 that our disclosure controls and procedures were effective at a reasonable assurance level.

Management's Report on Internal Control over Financial Reporting

Our management is responsible for establishing and maintaining adequate internal control over financial reporting as defined in Rules 13a-15(f) and 15d-15(f) under the Exchange Act. Our internal control over financial reporting is designed to provide reasonable assurance regarding the reliability of financial reporting and the preparation of financial statements for external purposes in accordance with generally accepted accounting principles. Our internal control over financial reporting includes those policies and procedures that:

(i) pertain to the maintenance of records that, in reasonable detail, accurately and fairly reflect the transactions and dispositions of our assets;

(ii) provide reasonable assurance that transactions are recorded as necessary to permit preparation of financial statements in accordance with generally accepted accounting principles, and that our receipts and expenditures are being made only in accordance with authorizations of our management and directors; and

(iii) provide reasonable assurance regarding prevention or timely detection of unauthorized acquisition, use or disposition of our assets that could have a material effect on our financial statements.

Because of its inherent limitations, internal control over financial reporting may not prevent or detect misstatements. Also, projections of any evaluation of effectiveness to future periods are subject to the risk that controls may become inadequate because of changes in conditions, or that the degree of compliance with the policies or procedures may deteriorate.

A material weakness is defined by the Public Company Accounting Oversight Board's Audit Standards AS 2201 as being a deficiency, or combination of deficiencies, in internal control over financial reporting, such that there is a reasonable possibility that a material misstatement of the company's annual or interim financial statements will not be prevented or detected on a timely basis by the company's internal controls.

Under the supervision and with the participation of our management, including our principal executive officer and principal financial officer, we conducted an evaluation of the effectiveness of our internal control over financial reporting based on the framework set forth in *Internal Control — Integrated Framework (2013)* issued by the Committee of Sponsoring Organizations of the Treadway Commission. Based on our evaluation under the framework set forth in *Internal Control — Integrated Framework (2013),* our management concluded that our internal control over financial reporting was effective as of December 31, 2016.

RSM US LLP, an independent registered public accounting firm, has issued an attestation report on our internal control over financial reporting as of December 31, 2016. That report is included in Part IV of this report.

Inherent Limitations on the Effectiveness of Controls

Management does not expect that our disclosure controls and procedures or our internal control over financial reporting will prevent or detect all errors and all fraud. A control system, no matter how well conceived and operated, can provide only reasonable, not absolute, assurance that the objectives of the control systems are met. Further, the design of a control system must reflect the fact that there are resource constraints, and the benefits of controls must be considered relative to their costs. Because of the inherent limitations in a cost-effective control system, no evaluation of internal control over financial reporting can provide absolute assurance that misstatements due to error or fraud will not occur or that all control issues and instances of fraud, if any, have been or will be detected.

These inherent limitations include the realities that judgments in decision-making can be faulty and that breakdowns can occur because of a simple error or mistake. Controls can also be circumvented by the individual acts of some persons, by collusion of two or more people, or by management override of the controls. The design of any system of controls is based in part on certain assumptions about the likelihood of future events, and there can be no assurance that any design will succeed in achieving its stated goals under all potential future conditions. Projections of any evaluation of controls effectiveness to future periods are subject to risks. Over time, controls may become inadequate because of changes in conditions or deterioration in the degree of compliance with policies or procedures.

Changes in Internal Control over Financial Reporting

There has been no change in our internal control over financial reporting (as defined in Rules 13a-15(f) and 15d-15(f) under the Exchange Act) during the most recently completed fiscal quarter that has materially affected, or is reasonably likely to materially affect, our internal control over financial reporting.

Item 9B. Other Information.

None.

PART III

Item 10. Directors, Executive Officers and Corporate Governance.

The information under the captions "Information about our Board of Directors, Board Committees and Related Matters" and "Section 16(a) Beneficial Ownership Reporting Compliance," appearing in the Proxy Statement, is hereby incorporated by reference.

Item 11. Executive Compensation.

The information under the caption "Executive Compensation and Related Information," appearing in the Proxy Statement, is hereby incorporated by reference.

Item 12. Security Ownership of Certain Beneficial Owners and Management and Related Stockholder Matters.

The information under the captions "Security Ownership of Certain Beneficial Owners and Management" and "Equity Compensation Plan Information," appearing in the Proxy Statement, is hereby incorporated by reference.

Item 13. Certain Relationships and Related Transactions, and Director Independence.

The information under the captions "Certain Relationships and Related Transactions" and "Information about our Board of Directors, Board Committees and Related Matters—Director Independence" appearing in the Proxy Statement, is hereby incorporated by reference.

Item 14. Principal Accounting Fees and Services.

The information under the caption "Audit Matters—Principal Accountant Fees and Services," appearing in the Proxy Statement, is hereby incorporated by reference.

PART IV

Item 15. Exhibits, Financial Statement Schedules.

(a)(1) Financial Statements

Reference is made to the financial statements listed on and attached following the Index to Consolidated Financial Statements contained on page F-1 of this report.

(a)(2) Financial Statement Schedules

None.

(a)(3) Exhibits

Reference is made to the exhibits listed on the Index to Exhibits.

INDEX TO CONSOLIDATED FINANCIAL STATEMENTS

REPORT OF INDEPENDENT REGISTERED PUBLIC ACCOUNTING FIRM

To the Board of Directors and Stockholders
Pacific Ethanol, Inc.

We have audited the accompanying consolidated balance sheets of Pacific Ethanol, Inc. and subsidiaries as of December 31, 2016 and 2015, and the related consolidated statements of operations, comprehensive income (loss), stockholders' equity, and cash flows for the years then ended. These financial statements are the responsibility of the Company's management. Our responsibility is to express an opinion on these financial statements based on our audits.

We conducted our audits in accordance with the standards of the Public Company Accounting Oversight Board (United States). Those standards require that we plan and perform the audit to obtain reasonable assurance about whether the financial statements are free of material misstatement. An audit includes examining, on a test basis, evidence supporting the amounts and disclosures in the financial statements. An audit also includes assessing the accounting principles used and significant estimates made by management, as well as evaluating the overall financial statement presentation. We believe that our audits provide a reasonable basis for our opinion.

In our opinion, the consolidated financial statements referred to above present fairly, in all material respects, the financial position of Pacific Ethanol, Inc. and subsidiaries as of December 31, 2016 and 2015, and the results of their operations and their cash flows for the years then ended, in conformity with U.S. generally accepted accounting principles.

We have also audited, in accordance with the standards of the Public Company Accounting Oversight Board (United States), Pacific Ethanol, Inc.'s and subsidiaries' internal control over financial reporting as of December 31, 2016, based on criteria established in *Internal Control — Integrated Framework* issued by the Committee of Sponsoring Organizations of the Treadway Commission in 2013, and our report dated March 15, 2017 expressed an unqualified opinion on the effectiveness of Pacific Ethanol, Inc.'s internal control over financial reporting.

/s/ RSM US LLP

Sioux Falls, South Dakota
March 15, 2017

REPORT OF INDEPENDENT REGISTERED PUBLIC ACCOUNTING FIRM

To the Board of Directors and Stockholders
Pacific Ethanol, Inc.

We have audited Pacific Ethanol, Inc.'s internal control over financial reporting as of December 31, 2016, based on criteria established in *Internal Control — Integrated Framework* issued by the Committee of Sponsoring Organizations of the Treadway Commission in 2013. Pacific Ethanol, Inc.'s management is responsible for maintaining effective internal control over financial reporting and for its assessment of the effectiveness of internal control over financial reporting included in the accompanying Management's Report on Internal Control over Financial Reporting. Our responsibility is to express an opinion on the company's internal control over financial reporting based on our audit.

We conducted our audit in accordance with the standards of the Public Company Accounting Oversight Board (United States). Those standards require that we plan and perform the audit to obtain reasonable assurance about whether effective internal control over financial reporting was maintained in all material respects. Our audit included obtaining an understanding of internal control over financial reporting, assessing the risk that a material weakness exists, and testing and evaluating the design and operating effectiveness of internal control based on the assessed risk. Our audit also included performing such other procedures as we considered necessary in the circumstances. We believe that our audit provides a reasonable basis for our opinion.

A company's internal control over financial reporting is a process designed to provide reasonable assurance regarding the reliability of financial reporting and the preparation of financial statements for external purposes in accordance with generally accepted accounting principles. A company's internal control over financial reporting includes those policies and procedures that *(a)* pertain to the maintenance of records that, in reasonable detail, accurately and fairly reflect the transactions and dispositions of the assets of the company; *(b)* provide reasonable assurance that transactions are recorded as necessary to permit preparation of financial statements in accordance with generally accepted accounting principles, and that receipts and expenditures of the company are being made only in accordance with authorizations of management and directors of the company; and *(c)* provide reasonable assurance regarding prevention or timely detection of unauthorized acquisition, use, or disposition of the company's assets that could have a material effect on the financial statements.

Because of its inherent limitations, internal control over financial reporting may not prevent or detect misstatements. Also, projections of any evaluation of effectiveness to future periods are subject to the risk that controls may become inadequate because of changes in conditions, or that the degree of compliance with the policies or procedures may deteriorate.

In our opinion, Pacific Ethanol, Inc. maintained, in all material respects, effective internal control over financial reporting as of December 31, 2016, based on criteria established in *Internal Control — Integrated Framework* issued by the Committee of Sponsoring Organizations of the Treadway Commission in 2013.

We have also audited, in accordance with the standards of the Public Company Accounting Oversight Board (United States), the consolidated balance sheets of Pacific Ethanol, Inc. and subsidiaries as of December 31, 2016 and 2015, and the related consolidated statements of operations, comprehensive income (loss), stockholders' equity and cash flows for the years then ended, and our report dated March 15, 2017 expressed an unqualified opinion.

/s/ RSM US LLP

Sioux Falls, South Dakota

March 15, 2017

REPORT OF INDEPENDENT REGISTERED PUBLIC ACCOUNTING FIRM

To the Board of Directors and Stockholders
Pacific Ethanol, Inc.

We have audited the accompanying consolidated statements of operations, comprehensive income (loss), stockholders' equity, and cash flows for the year ended December 31, 2014 of Pacific Ethanol, Inc. and subsidiaries (collectively, the financial statements). These financial statements are the responsibility of the Company's management. Our responsibility is to express an opinion on these financial statements based on our audit.

We conducted our audit in accordance with the standards of the Public Company Accounting Oversight Board (United States). Those standards require that we plan and perform the audit to obtain reasonable assurance about whether the financial statements are free of material misstatement. An audit includes examining, on a test basis, evidence supporting the amounts and disclosures in the financial statements. An audit also includes assessing the accounting principles used and significant estimates made by management, as well as evaluating the overall financial statement presentation. We believe that our audit provides a reasonable basis for our opinion.

In our opinion, the consolidated financial statements referred to above present fairly, in all material respects, the results of operations of Pacific Ethanol, Inc. and subsidiaries and their cash flows for the year ended December 31, 2014, in conformity with U.S. generally accepted accounting principles.

/s/ Hein & Associates LLP

Hein & Associates LLP

Irvine, California
March 16, 2015, except for the 2014 information in Note 5 as to which the date is March 15, 2016, and the 2014 information in Note 17 as to which the date is March 15, 2017

PACIFIC ETHANOL, INC.
CONSOLIDATED BALANCE SHEETS
(in thousands, except shares and par value)

	December 31, 2016	December 31, 2015
ASSETS		
Current Assets:		
Cash and cash equivalents	$ 68,590	$ 52,712
Accounts receivable, net of allowance for doubtful accounts of $331 and $25, respectively	86,275	61,346
Inventories	60,070	60,820
Prepaid inventory	9,946	5,973
Income tax receivables	5,730	10,654
Derivative assets	978	2,081
Other current assets	3,612	4,356
Total current assets	235,201	197,942
Property and equipment, net	465,190	464,960
Other Assets:		
Intangible assets, net	2,678	2,678
Other assets	5,169	9,100
Total other assets	7,847	11,778
Total Assets	$ 708,238	$ 674,680

The accompanying notes are an integral part of these consolidated financial statements.

PACIFIC ETHANOL, INC.
CONSOLIDATED BALANCE SHEETS (CONTINUED)
(in thousands, except shares and par value)

	December 31,	
	2016	**2015**
LIABILITIES AND STOCKHOLDERS' EQUITY		
Current Liabilities:		
Accounts payable – trade	$ 37,051	$ 30,520
Accrued liabilities	20,280	10,072
Current portion – capital leases	794	4,248
Current portion – long-term debt	10,500	17,003
Accrued PE Op Co. purchase	3,828	3,828
Derivative liabilities	4,115	1,848
Other current liabilities	2,273	5,390
Total current liabilities	78,841	72,909
Long-term debt, net of current portion	188,028	203,861
Capital leases, net of current portion	547	4,183
Warrant liabilities at fair value	651	273
Other liabilities	21,910	21,910
Total Liabilities	289,977	303,136
Commitments and contingencies (Notes 1, 8, 9 and 15)		
Stockholders' Equity:		
Preferred stock, $0.001 par value; 10,000,000 shares authorized:		
Series A: 1,684,375 shares authorized; no shares issued and outstanding as of December 31, 2016 and 2015	–	–
Series B: 1,580,790 shares authorized; 926,942 shares issued and outstanding as of December 31, 2016 and 2015; liquidation preference of $18,075 as of December 31, 2016	1	1
Common stock, $0.001 par value; 300,000,000 shares authorized; 39,772,238 and 38,974,972 shares issued and outstanding as of December 31, 2016 and 2015, respectively	40	39
Non-voting common stock, $0.001 par value; 3,553,000 shares authorized; 3,540,132 shares issued and outstanding as of December 31, 2016 and 2015	4	4
Additional paid-in capital	922,698	902,843
Accumulated other comprehensive income (expense)	(2,620)	1,040
Accumulated deficit	(532,233)	(532,383)
Total Pacific Ethanol, Inc. stockholders' equity	387,890	371,544
Noncontrolling interests	30,371	–
Total stockholders' equity	418,261	371,544
Total Liabilities and Stockholders' Equity	$ 708,238	$ 674,680

The accompanying notes are an integral part of these consolidated financial statements.

PACIFIC ETHANOL, INC.
CONSOLIDATED STATEMENTS OF OPERATIONS
(in thousands, except per share data)

	Years Ended December 31,		
	2016	**2015**	**2014**
Net sales	$ 1,624,758	$ 1,191,176	$ 1,107,412
Cost of goods sold	1,572,926	1,183,766	998,927
Gross profit	51,832	7,410	108,485
Selling, general and administrative expenses	28,323	23,412	17,108
Asset impairment	–	1,970	–
Income (loss) from operations	23,509	(17,972)	91,377
Fair value adjustments and warrant inducements	(557)	1,641	(37,532)
Interest expense, net	(22,406)	(12,594)	(9,438)
Loss on extinguishment of debt	–	–	(2,363)
Other income (expense), net	(1)	18	(905)
Income (loss) before provision for income taxes	545	(28,907)	41,139
Provision (benefit) for income taxes	(981)	(10,034)	15,137
Consolidated net income (loss)	1,526	(18,873)	26,002
Net (income) loss attributed to noncontrolling interests	(107)	87	(4,713)
Net income (loss) attributed to Pacific Ethanol, Inc.	$ 1,419	$ (18,786)	$ 21,289
Preferred stock dividends	(1,269)	(1,265)	(1,265)
Income allocated to participating securities	(2)	–	(585)
Income (loss) available to common stockholders	$ 148	$ (20,051)	$ 19,439
Income (loss) per share, basic	$ 0.00	$ (0.60)	$ 0.93
Income (loss) per share, diluted	$ 0.00	$ (0.60)	$ 0.86
Weighted-average shares outstanding, basic	42,182	33,173	20,810
Weighted-average shares outstanding, diluted	42,251	33,173	22,669

The accompanying notes are an integral part of these consolidated financial statements.

PACIFIC ETHANOL, INC.
CONSOLIDATED STATEMENTS OF COMPREHENSIVE INCOME (LOSS)
(in thousands)

	Years Ended December 31,		
	2016	**2015**	**2014**
Consolidated net income (loss)	$ 1,526	$ (18,873)	$ 26,002
Other comprehensive income (expense) – net gain (loss) arising during the period on defined benefit pension plans	(3,660)	1,040	–
Total comprehensive income (loss)	(2,134)	(17,833)	26,002
Comprehensive (income) loss attributed to noncontrolling interests	(107)	87	(4,713)
Comprehensive income (loss) attributed to Pacific Ethanol, Inc.	$ (2,241)	$ (17,746)	$ 21,289

The accompanying notes are an integral part of these consolidated financial statements.

PACIFIC ETHANOL, INC.
CONSOLIDATED STATEMENT OF STOCKHOLDERS' EQUITY
(in thousands)

	Preferred Stock		Common Stock						
	Shares	Amount	Shares	Amount	Additional Paid-In Capital	Accumulated Deficit	Accumulated. Other Comprehensive Income	Non-Controlling Interests	Total
Balances, January 1, 2014	927	$ 1	16,126	$ 16	$ 621,557	$ (532,356)	$ –	$ 5,683	$ 94,901
Stock-based compensation expense – restricted stock issued to employees and directors, net of cancellations and tax	–	–	90	–	1,890	–	–	–	1,890
Issuance of common stock	–	–	1,750	2	26,071	–	–	–	26,073
Warrant exercises	–	–	6,413	6	85,156	–	–	–	85,162
Shares issued as payment of prior unpaid Series B preferred dividends	–	–	120	1	1,462	–	–	–	1,463
Purchases of interests in PE Op Co.	–	–	–	–	(79)	–	–	(5,921)	(6,000)
Tax impact of purchases of interests in PE Op Co.	–	–	–	–	(10,244)	–	–	–	(10,244)
Preferred stock dividends	–	–	–	–	–	(1,265)	–	–	(1,265)
Net income	–	–	–	–	–	21,289	–	4,713	26,002
Balances, December 31, 2014	927	$ 1	24,499	$ 25	$ 725,813	$ (512,332)	$ –	$ 4,475	$ 217,982
Stock-based compensation expense – restricted stock and options to employees and directors, net of cancellations and tax	–	–	216	–	1,475	–	–	–	1,475
Warrant exercises	–	–	42	–	440	–	–	–	440
Shares issued in Aventine acquisition	–	–	17,758	18	174,555	–	–	–	174,573
Pension plan adjustment	–	–	–	–	–	–	1,040	–	1,040
Purchases of interests in PE Op Co.	–	–	–	–	560	–	–	(4,388)	(3,828)
Preferred stock dividends	–	–	–	–	–	(1,265)	–	–	(1,265)
Net loss	–	–	–	–	–	(18,786)	–	(87)	(18,873)
Balances, December 31, 2015	927	$ 1	42,515	$ 43	$ 902,843	$ (532,383)	$ 1,040	$ –	$ 371,544
Stock-based compensation expense – restricted stock and options to employees and directors, net of cancellations and tax	–	–	659	1	2,281	–	–	–	2,282
Warrant exercises	–	–	138	–	1,338	–	–	–	1,338
ACEC contribution to form Pacific Aurora	–	–	–	–	5,761	–	–	10,739	16,500
Sale of Pacific Aurora interests to ACEC	–	–	–	–	10,475	–	–	19,525	30,000
Pension plan adjustment	–	–	–	–	–	–	(3,660)	–	(3,660)
Preferred stock dividends	–	–	–	–	–	(1,269)	–	–	(1,269)
Net income	–	–	–	–	–	1,419	–	107	1,526
Balances, December 31, 2016	927	$ 1	43,312	$ 44	$ 922,698	$ (532,233)	$ (2,620)	$ 30,371	$ 418,261

The accompanying notes are an integral part of these consolidated financial statements.

PACIFIC ETHANOL, INC.
CONSOLIDATED STATEMENTS OF CASH FLOWS
(in thousands)

	For the Years Ended December 31,		
	2016	**2015**	**2014**
Operating Activities:			
Consolidated net income (loss)	$ 1,526	$ (18,873)	$ 26,002
Adjustments to reconcile consolidated net income (loss) to cash provided by (used in) operating activities:			
Depreciation and amortization of intangibles	35,441	23,632	13,186
Fair value adjustments	557	(1,641)	35,260
Loss on extinguishment of debt	–	–	2,363
Asset impairment	–	1,970	–
Deferred income taxes	(1,122)	(2,023)	5,129
Inventory valuation	–	509	970
Change in fair value on commodity derivative instruments	1,984	542	808
Amortization of deferred financing costs	137	272	1,217
Amortization of debt discounts	2,322	716	1,815
Noncash compensation	2,616	2,019	1,838
Bad debt expense (recovery)	306	(354)	(42)
Loss on disposals of assets	–	–	439
Interest expense added to plant term debt	9,451	–	–
Changes in operating assets and liabilities, net of effects from acquisition of Aventine in 2015:			
Accounts receivable	(25,235)	(15,950)	726
Inventories	750	(13,296)	3,866
Prepaid expenses and other assets	6,358	58	(7,818)
Prepaid inventory	(3,973)	5,622	720
Accounts payable and accrued expenses	9,279	(10,045)	1,853
Net cash provided by (used in) operating activities	$ 40,397	$ (26,842)	$ 88,332
Investing Activities:			
Additions to property and equipment	$ (19,171)	$ (20,507)	$ (13,259)
Proceeds (payments) for cash collateralized letters of credit	4,574	(4,574)	–
Net cash from acquisition of Aventine	–	18,756	–
Net cash used in investing activities	$ (14,597)	$ (6,325)	$ (13,259)

The accompanying notes are an integral part of these consolidated financial statements.

PACIFIC ETHANOL, INC.
CONSOLIDATED STATEMENTS OF CASH FLOWS
(in thousands)

	For the Years Ended December 31,		
	2016	**2015**	**2014**
Financing Activities:			
Proceeds from warrant exercises	$ 1,164	$ 368	$ 43,676
Proceeds from Pekin and Pacific Aurora credit agreements	97,000	–	–
Proceeds from notes	53,350	–	–
Sales (purchases) of noncontrolling interests	30,000	–	(6,000)
Proceeds from assessment financing	2,096	–	–
Net proceeds from common stock and warrants	–	–	26,073
Net proceeds (payments) on Kinergy's line of credit	(11,141)	43,584	(1,512)
Payments on plant borrowings	(172,073)	(13,833)	(39,792)
Purchase of plant owners' debt	–	–	(17,038)
Payments on senior unsecured notes	–	–	(13,984)
Debt issuance costs	(1,960)	–	(438)
Payment on related party note	–	–	(750)
Preferred stock dividend payments	(1,269)	(1,265)	(3,459)
Payments on capital leases	(7,089)	(5,059)	(4,916)
Net cash provided by (used in) financing activities	$ (9,922)	$ 23,795	$ (18,140)
Net increase (decrease) in cash and cash equivalents	15,878	(9,372)	56,933
Cash and cash equivalents at beginning of period	52,712	62,084	5,151
Cash and cash equivalents at end of period	$ 68,590	$ 52,712	$ 62,084
Supplemental Information:			
Interest paid	$ 11,168	$ 11,685	$ 6,596
Income tax refunds (payments)	$ 4,784	$ 5,710	$ (17,930)
Noncash financing and investing activities:			
Preferred stock dividends paid in common stock	$ –	$ –	$ 1,463
Accrued payment for ownership positions of PE Op Co.	$ –	$ 3,828	$ –
Capital leases added to plant and equipment	$ –	$ 1,864	$ –
Reclass of warrant liability to equity upon exercises	$ 179	$ 72	$ 41,486
Contribution of property and equipment for noncontrolling interest	$ 16,500	$ –	$ –
Common stock issued in Aventine acquisition (see Note 2)	$ –	$ 174,573	$ –

The accompanying notes are an integral part of these consolidated financial statements.

1. ORGANIZATION AND SIGNIFICANT ACCOUNTING POLICIES .

Organization and Business – The consolidated financial statements include, for all periods presented, the accounts of Pacific Ethanol, Inc., a Delaware corporation ("Pacific Ethanol"), and its direct and indirect subsidiaries (collectively, the "Company"), including its wholly-owned subsidiaries, Kinergy Marketing LLC, an Oregon limited liability company ("Kinergy"), Pacific Ag. Products, LLC, a California limited liability company ("PAP") and PE Op Co., a Delaware corporation ("PE Op Co.").

The Company's acquisition of Aventine Renewable Energy Holdings, Inc. (now, Pacific Ethanol Central, LLC, a Delaware limited liability company "PE Central") was consummated on July 1, 2015, and as a result, the Company's consolidated financial statements include the results of PE Central only as of and for the year ended December 31, 2016 and the six months ended December 31, 2015.

On December 15, 2016, the Company and Aurora Cooperative Elevator Company, a Nebraska cooperative corporation ("ACEC"), closed a transaction under a contribution agreement under which the Company contributed its Aurora, Nebraska ethanol facilities and ACEC contributed its Aurora grain elevator and related grain handling assets to Pacific Aurora, LLC ("Pacific Aurora") in exchange for equity interests in Pacific Aurora. On December 15, 2016, concurrently with the closing under the contribution agreement, the Company sold a portion of its equity interest in Pacific Aurora to ACEC. As a result, as of December 15, 2016 and through December 31, 2016, the Company owned 73.93% of Pacific Aurora and ACEC owned 26.07% of Pacific Aurora. The Company consolidates 100% of the results of Pacific Aurora and records ACEC's 26.07% equity interest as noncontrolling interests in the accompanying financial statements.

The Company is a leading producer and marketer of low-carbon renewable fuels in the United States. The Company's four ethanol plants in the Western United States (together with their respective holding companies, the "Pacific Ethanol West Plants") are located in close proximity to both feed and ethanol customers and thus enjoy unique advantages in efficiency, logistics and product pricing. These plants produce among the lowest-carbon ethanol produced in the United States due to low energy use in production.

With the addition of four Midwestern ethanol plants in July 2015 as a result of the Company's acquisition of PE Central, the Company now has a combined ethanol production capacity of 515 million gallons per year, markets, on an annualized basis, nearly 1.0 billion gallons of ethanol, and produces, on an annualized basis, over 1.5 million tons of co-products such as wet and dry distillers grains, wet and dry corn gluten feed, condensed distillers solubles, corn gluten meal, corn germ, distillers yeast and CO_2. The Company's four ethanol plants in the Midwest (together with their respective holding companies, the "Pacific Ethanol Central Plants") are located in the heart of the Corn Belt, benefit from low-cost and abundant feedstock production and allow for access to many additional domestic markets. In addition, the Company's ability to load unit trains from these facilities in the Midwest allows for greater access to international markets.

As of December 31, 2016, all eight facilities were operating. On April 30, 2014, the Company's previously idled facility in Madera, California commenced producing ethanol. As market conditions change, the Company may increase, decrease or idle production at one or more operational facilities or resume operations at any idled facility.

Basis of Presentation – The consolidated financial statements and related notes have been prepared in accordance with accounting principles generally accepted in the United States ("GAAP") and include the accounts of the Company. All significant intercompany accounts and transactions have been eliminated in consolidation.

Segments – A segment is a component of an enterprise whose operating results are regularly reviewed by the enterprise's chief operating decision maker to make decisions about resources to be allocated to the segment and assess its performance, and for which discrete financial information is available. The Company determines and discloses its segments in accordance with the Financial Accounting Standards Board's ("FASB") Accounting Standards Codification Section 280, *Segment Reporting* ("ASC 280"), which defines how to determine segments. The Company reports its financial and operating performance in two reportable segments: (1) ethanol production, which includes the production and sale of ethanol and co-products, with all of the Company's production facilities aggregated, and (2) marketing and distribution, which includes marketing and merchant trading for Company-produced ethanol and co-products and third-party ethanol.

Cash and Cash Equivalents – The Company considers all highly-liquid investments with an original maturity of three months or less to be cash equivalents.

Accounts Receivable and Allowance for Doubtful Accounts – Trade accounts receivable are presented at face value, net of the allowance for doubtful accounts. The Company sells ethanol to gasoline refining and distribution companies, sells distillers grains and other feed co-products to dairy operators and animal feedlots and sells corn oil to poultry and biodiesel customers generally without requiring collateral. Due to a limited number of ethanol customers, the Company had significant concentrations of credit risk from sales of ethanol as of December 31, 2016 and 2015, as described below.

The Company maintains an allowance for doubtful accounts for balances that appear to have specific collection issues. The collection process is based on the age of the invoice and requires attempted contacts with the customer at specified intervals. If, after a specified number of days, the Company has been unsuccessful in its collection efforts, a bad debt allowance is recorded for the balance in question. Delinquent accounts receivable are charged against the allowance for doubtful accounts once uncollectibility has been determined. The factors considered in reaching this determination are the apparent financial condition of the customer and the Company's success in contacting and negotiating with the customer. If the financial condition of the Company's customers were to deteriorate, resulting in an impairment of ability to make payments, additional allowances may be required.

Of the accounts receivable balance, approximately $64,853,000 and $42,049,000 at December 31, 2016 and 2015, respectively, were used as collateral under Kinergy's operating line of credit. The allowance for doubtful accounts was $331,000 and $25,000 as of December 31, 2016 and 2015, respectively. The Company recorded a bad debt expense of $306,000 and a recovery of $354,000 and $42,000 for the years ended December 31, 2016, 2015 and 2014, respectively. The Company does not have any off-balance sheet credit exposure related to its customers.

Concentration Risks – Credit risk represents the accounting loss that would be recognized at the reporting date if counterparties failed completely to perform as contracted. Concentrations of credit risk, whether on- or off-balance sheet, that arise from financial instruments exist for groups of customers or counterparties when they have similar economic characteristics that would cause their ability to meet contractual obligations to be similarly affected by changes in economic or other conditions described below. Financial instruments that subject the Company to credit risk consist of cash balances maintained in excess of federal depository insurance limits and accounts receivable, which have no collateral or security. The Company has not experienced any significant losses in such accounts and believes that it is not exposed to any significant risk of loss of cash.

The Company sells fuel-grade ethanol to gasoline refining and distribution companies. The Company sold ethanol to customers representing 10% or more of the Company's total net sales, as follows:

	Years Ended December 31,		
	2016	2015	2014
Customer A	17%	12%	20%
Customer B	12%	15%	20%
Customer C	6%	12%	11%

The Company had accounts receivable due from these customers totaling $21,274,000 and $19,858,000, representing 24% and 32% of total accounts receivable, as of December 31, 2016 and 2015, respectively.

The Company purchases corn, its largest cost component in producing ethanol, from its suppliers. The Company purchased corn from suppliers representing 10% or more of the Company's total corn purchases, as follows:

	Years Ended December 31,		
	2016	2015	2014
Supplier A	13%	19%	26%
Supplier B	13%	13%	11%
Supplier C	8%	9%	15%

Approximately 29% of the Company's employees are covered by a collective bargaining agreement.

Inventories – Inventories consisted primarily of bulk ethanol, corn, co-products, Low-Carbon Fuel Standard ("LCFS") credits and unleaded fuel, and are valued at the lower-of-cost-or-net realizable value, with cost determined on a first-in, first-out basis. Inventory balances consisted of the following (in thousands):

	December 31,	
	2016	2015
Finished goods	$ 33,773	$ 31,153
LCFS credits	10,926	6,957
Raw materials	6,571	9,891
Work in progress	7,092	11,121
Other	1,708	1,698
Total	$ 60,070	$ 60,820

Property and Equipment – Property and equipment are stated at cost. Depreciation is computed using the straight-line method over the following estimated useful lives:

Buildings	40 years
Facilities and plant equipment	10 – 25 years
Other equipment, vehicles and furniture	5 – 10 years

The cost of normal maintenance and repairs is charged to operations as incurred. Significant capital expenditures that increase the life of an asset are capitalized and depreciated over the estimated remaining useful life of the asset. The cost of fixed assets sold, or otherwise disposed of, and the related accumulated depreciation or amortization are removed from the accounts, and any resulting gains or losses are reflected in current operations.

Intangible Assets – The Company assesses indefinite-lived intangible assets for impairment annually, or more frequently if circumstances indicate impairment may have occurred. If the carrying value of an indefinite-lived intangible asset exceeds its fair value, an impairment loss is recognized in an amount equal to that excess. If the Company determines that an impairment charge is needed, the charge will be recorded as an asset impairment in the consolidated statements of operations.

Deferred Financing Costs – Deferred financing costs are costs incurred to obtain debt financing, including all related fees, and are amortized as interest expense over the term of the related financing using the straight-line method, which approximates the interest rate method. Amortization of deferred financing costs was $137,000, $272,000 and $779,000 for the years ended December 31, 2016, 2015 and 2014, respectively. Unamortized deferred financing costs were approximately $1,708,000 and $462,000 as of December 31, 2016 and 2015, respectively, and are recorded net of long-term debt in the consolidated balance sheets.

Derivative Instruments and Hedging Activities – Derivative transactions, which can include exchange-traded forward contracts and futures positions on the New York Mercantile Exchange or the Chicago Board of Trade, are recorded on the balance sheet as assets and liabilities based on the derivative's fair value. Changes in the fair value of derivative contracts are recognized currently in income unless specific hedge accounting criteria are met. If derivatives meet those criteria, and hedge accounting is elected, effective gains and losses are deferred in accumulated other comprehensive income (loss) and later recorded together with the hedged item in consolidated income (loss). For derivatives designated as a cash flow hedge, the Company formally documents the hedge and assesses the effectiveness with associated transactions. The Company has designated and documented contracts for the physical delivery of commodity products to and from counterparties as normal purchases and normal sales.

Revenue Recognition – The Company recognizes revenue when it is realized or realizable and earned. The Company considers revenue realized or realizable and earned when there is persuasive evidence of an arrangement, delivery has occurred, the sales price is fixed or determinable, and collection is reasonably assured. The Company derives revenue primarily from sales of ethanol and related co-products. The Company recognizes revenue when title transfers to its customers, which is generally upon the delivery of these products to a customer's designated location. These deliveries are made in accordance with sales commitments and related sales orders entered into either verbally or in writing with customers. The sales commitments and related sales orders provide quantities, pricing and conditions of sales. In this regard, the Company engages in three basic types of revenue generating transactions:

- *As a producer*. Sales as a producer consist of sales of the Company's inventory produced at its plants.

- *As a merchant*. Sales as a merchant consist of sales to customers through purchases from third-party suppliers in which the Company may or may not obtain physical control of the ethanol or co-products, in which shipments are directed from the Company's suppliers to its terminals or direct to its customers but for which the Company accepts the risk of loss in the transactions.

- *As an agent*. Sales as an agent consist of sales to customers through purchases from third-party suppliers in which the risks and rewards of inventory ownership remain with third-party suppliers and the Company receives a predetermined service fee under these transactions.

Revenue from sales of third-party ethanol and co-products is recorded net of costs when the Company is acting as an agent between a customer and a supplier and gross when the Company is a principal to the transaction. The Company recorded $1,604,000, $1,510,000 and $1,908,000 in net sales when acting as an agent for the years ended December 31, 2016, 2015 and 2014, respectively. Several factors are considered to determine whether the Company is acting as an agent or principal, most notably whether the Company is the primary obligor to the customer and whether the Company has inventory risk and related risk of loss or whether the Company adds meaningful value to the supplier's product or service. Consideration is also given to whether the Company has latitude in establishing the sales price or has credit risk, or both. When the Company acts as an agent, it recognizes revenue on a net basis or recognizes its predetermined fees and any associated freight, based upon the amount of net revenues retained in excess of amounts paid to suppliers.

The Company records revenues based upon the gross amounts billed to its customers in transactions where the Company acts as a producer or a merchant and obtains title to ethanol and its co-products and therefore owns the product and any related, unmitigated inventory risk for the ethanol, regardless of whether the Company actually obtains physical control of the product.

Shipping and Handling Costs – Shipping and handling costs are classified as a component of cost of goods sold in the accompanying consolidated statements of operations.

California Ethanol Producer Incentive Program – The Company participated in the California Ethanol Producer Incentive Program ("CEPIP") through the Pacific Ethanol West Plants located in California since the program's inception in 2010. The CEPIP was a program to provide funds to an eligible California facility—up to $0.25 per gallon of production—when current production corn crush spreads, measured as the difference between specified ethanol and corn index prices, were less than prescribed levels determined by the California Energy Commission. As of December 31, 2014, the program is no longer funded. For any month in which a payment was made by the CEPIP, the Company would be required to reimburse the funds within the subsequent five years from each payment date, if the corn crush spread exceeded $1.00 per gallon. In 2010 and 2011, the Company received an aggregate of $2,000,000 in CEPIP funds. Since these funds were provided to subsidize low production costs and encourage eligible facilities to either continue production or start up production in low margin environments, the Company recorded the proceeds as a credit to cost of goods sold in the periods the funds were received. For the year ended December 31, 2014, the Company recorded aggregate amounts of $1,878,000 as cost of goods sold in respect of the Company's repayments under the CEPIP to the California Energy Commission.

Stock-Based Compensation – The Company accounts for the cost of employee services received in exchange for the award of equity instruments based on the fair value of the award, determined on the date of grant. The expense is to be recognized over the period during which an employee is required to provide services in exchange for the award. The Company estimates forfeitures at the time of grant and makes revisions, if necessary, in the second quarter of each year if actual forfeitures differ from those estimates. Based on historical experience, the Company estimated future unvested forfeitures at 8% for the years ended December 31, 2016, 2015 and 2014. The Company recognizes stock-based compensation expense as a component of selling, general and administrative expenses in the consolidated statements of operations.

Impairment of Long-Lived Assets – The Company assesses the impairment of long-lived assets, including property and equipment, internally developed software and purchased intangibles subject to amortization, when events or changes in circumstances indicate that the fair value of assets could be less than their net book value. In such event, the Company assesses long-lived assets for impairment by first determining the forecasted, undiscounted cash flows the asset is expected to generate plus the net proceeds expected from the sale of the asset. If this amount is less than the carrying value of the asset, the Company will then determine the fair value of the asset. An impairment loss would be recognized when the fair value is less than the related asset's net book value, and an impairment expense would be recorded in the amount of the difference. Forecasts of future cash flows are judgments based on the Company's experience and knowledge of its operations and the industries in which it operates. These forecasts could be significantly affected by future changes in market conditions, the economic environment, including inflation, and purchasing decisions of the Company's customers.

Provision for Income Taxes – Income taxes are accounted for under the asset and liability approach, where deferred tax assets and liabilities are determined based on differences between financial reporting and tax basis of assets and liabilities, and are measured using enacted tax rates and laws that are expected to be in effect when the differences reverse. Valuation allowances are established when necessary to reduce deferred tax assets to the amounts expected to be realized.

The Company accounts for uncertainty in income taxes using a two-step approach to recognizing and measuring uncertain tax positions. The first step is to evaluate the tax position for recognition by determining whether it is more likely than not that the position will be sustained on audit, including resolution of related appeals or litigation processes, if any. The second step is to measure the tax benefit as the largest amount which is more than 50% likely of being realized upon ultimate settlement. An uncertain tax position is considered effectively settled on completion of an examination by a taxing authority if certain other conditions are satisfied. Should the Company incur interest and penalties relating to tax uncertainties, such amounts would be classified as a component of interest expense, net and other income (expense), net, respectively. Deferred tax assets and liabilities are classified as noncurrent in the Company's consolidated balance sheets.

The Company files a consolidated federal income tax return. This return includes all wholly-owned subsidiaries as well as the Company's pro-rata share of taxable income from pass-through entities in which the Company owns less than 100%. State tax returns are filed on a consolidated, combined or separate basis depending on the applicable laws relating to the Company and its subsidiaries.

Income (Loss) Per Share – Basic income (loss) per share is computed on the basis of the weighted-average number of shares of common stock outstanding during the period. Preferred dividends are deducted from net income (loss) attributed to Pacific Ethanol, Inc. and are considered in the calculation of income (loss) available to common stockholders in computing basic income (loss) per share. Common stock equivalents to the preferred stock are considered participating securities and are also included in this calculation when dilutive.

The following tables compute basic and diluted earnings per share (in thousands, except per share data):

	Year Ended December 31, 2016		
	Income Numerator	Shares Denominator	Per-Share Amount
Net income attributed to Pacific Ethanol	$ 1,419		
Less: Preferred stock dividends	(1,269)		
Less: Allocated to participating securities	(2)		
Basic income per share:			
Income available to common stockholders	$ 148	42,182	$ 0.00
Add: Options	–	69	
Diluted income per share:			
Income available to common stockholders	$ 148	42,251	$ 0.00

	Year Ended December 31, 2015		
	Loss Numerator	Shares Denominator	Per-Share Amount
Net loss attributed to Pacific Ethanol	$ (18,786)		
Less: Preferred stock dividends	(1,265)		
Basic and Diluted loss per share:			
Loss available to common stockholders	$ (20,051)	33,173	$ (0.60)

	Year Ended December 31, 2014		
	Income Numerator	Shares Denominator	Per-Share Amount
Net income attributed to Pacific Ethanol	$ 21,289		
Less: Preferred stock dividends	(1,265)		
Less: Allocated to participating securities	(585)		
Basic income per share:			
Income available to common stockholders	$ 19,439	20,810	$ 0.93
Add: Warrants	–	1,859	
Diluted income per share:			
Income available to common stockholders	$ 19,439	22,669	$ 0.86

There were an aggregate of 704,000, 817,000 and 660,000 potentially dilutive shares from convertible securities outstanding as of December 31, 2016, 2015 and 2014, respectively. These convertible securities were not considered in calculating diluted income (loss) per common share for the years ended December 31, 2016, 2015 and 2014 as their effect would be anti-dilutive.

Financial Instruments – The carrying values of cash and cash equivalents, accounts receivable, accounts payable, accrued liabilities and accrued PE Op Co. purchase are reasonable estimates of their fair values because of the short maturity of these items. The Company recorded its warrant liabilities at fair value. The Company believes the carrying value of its long-term debt approximates fair value because the interest rates on these instruments are variable, and are considered Level 2 fair value measurements.

Employment-related Benefits – Employment-related benefits associated with pensions and postretirement health care are expensed based on actuarial analysis. The recognition of expense is affected by estimates made by management, such as discount rates used to value certain liabilities, investment rates of return on plan assets, increases in future wage amounts and future health care costs. Discount rates are determined based on a spot yield curve that includes bonds with maturities that match expected benefit payments under the plan.

Estimates and Assumptions – The preparation of the consolidated financial statements in conformity with GAAP requires management to make estimates and assumptions that affect the reported amounts of assets and liabilities and disclosure of contingent assets and liabilities at the date of the financial statements and the reported amounts of revenues and expenses during the reporting period. Significant estimates are required as part of determining the fair value of warrants, allowance for doubtful accounts, net realizable value of inventory, estimated lives of property and equipment, long-lived asset impairments, valuation allowances on deferred income taxes and the potential outcome of future tax consequences of events recognized in the Company's financial statements or tax returns, and the valuation of assets acquired and liabilities assumed as a result of business combinations. Actual results and outcomes may materially differ from management's estimates and assumptions.

Subsequent Events – Management evaluates, as of each reporting period, events or transactions that occur after the balance sheet date through the date that the financial statements are issued for either disclosure or adjustment to the consolidated financial results.

Reclassifications – Certain prior year amounts have been reclassified to conform to the current presentation. Such reclassification had no effect on the consolidated net income (loss) reported in the consolidated statements of operations.

Recent Accounting Pronouncements – In February 2016, the FASB issued new guidance on accounting for leases. Under the new guidance, lessees will be required to recognize the following for all leases (with the exception of short-term leases) at the commencement date: (1) a lease liability, which is a lessee's obligation to make lease payments arising from a lease, measured on a discounted cash flow basis; and (2) a "right of use" asset, which is an asset that represents the lessee's right to use the specified asset for the lease term. Under the new guidance, lessor accounting is largely unchanged, with some minor exceptions. Lessees will no longer be provided with a source of off-balance sheet financing for other than short-term leases. The standard is effective for public companies for annual reporting periods beginning after December 15, 2019, and for interim periods beginning after December 15, 2020. Early adoption is permitted. The Company has several operating leases that may be impacted by this guidance. The Company is currently evaluating the impact of the adoption of this accounting standard on its consolidated results of operations and financial condition.

In May 2014, the FASB issued new guidance on the recognition of revenue. The guidance states that an entity should recognize revenue to depict the transfer of promised goods or services to customers in an amount that reflects the consideration to which the entity expects to be entitled in exchange for those goods or services. The standard is effective for annual reporting periods beginning after December 15, 2017, including interim periods within that reporting period. The Company's adoption begins with the first fiscal quarter of fiscal year 2018. In March and April 2016, the FASB issued further revenue recognition guidance amending principal vs. agent considerations regarding whether an entity should recognize revenue to depict the transfer of promised goods or services to customers in an amount that reflects the consideration to which the entity expects to be entitled in exchange for those goods and services. The Company is currently evaluating the impact of the adoption of this accounting standard update on its consolidated results of operations and financial condition. The Company has not yet selected a transition method, nor has it determined the effect of the standard on its ongoing financial reporting. The Company has begun the process in its evaluation and believes it is following an appropriate timeline to allow for proper recognition, presentation and disclosure effective beginning in the year ending December 31, 2018.

In April 2015, the FASB issued new guidance on presentation of debt issuance costs. Historically, entities have presented debt issuance costs as an asset. Under the new guidance, effective for fiscal years beginning after December 31, 2015, debt issuance costs have been reclassified as a reduction of the carrying amount of the related debt balance. The guidance does not change any of the Company's other debt recognition or disclosure. On January 1, 2016, the Company adopted this guidance for all periods presented on the consolidated balance sheets. The impact of the adoption was a reclassification of other assets to long-term debt, net of current portion, of $1,708,000 and $462,000 as of December 31, 2016 and 2015, respectively.

In July 2015, the FASB issued new guidance on simplifying the measurement of inventory. Under the new guidance, entities are required to measure most inventory at the lower of cost and net realizable value, thereby simplifying the current guidance under which an entity must measure inventory at the lower of cost or market. This guidance is effective prospectively for fiscal years beginning after December 15, 2016. Early adoption is permitted. The Company adopted the guidance in 2015 with no material impact on its results of operations or financial condition.

In September 2015, the FASB issued new guidance on business combinations, simplifying the accounting for measurement-period adjustments. Under the new guidance, an acquirer must recognize adjustments to provisional amounts that are identified during the measurement period in the reporting period in which the adjustment amounts are determined. The guidance also requires acquirers to present separately on the face of the statement of operations or disclose in the notes, the portion of the amount recorded in current-period earnings by line item that would have been recorded in previous reporting periods if the adjustment to the provisional amounts had been recognized as of the acquisition date. The guidance is effective for fiscal years beginning after December 31, 2015, applied prospectively. The Company will apply the guidance to future acquisitions.

In April 2016, the FASB issued new guidance to reduce the complexity of certain aspects of accounting for employee share-based payment transactions. Currently, accruals of compensation costs are based on an estimated forfeiture rate. The new guidance allows an entity to make an entity-wide accounting policy election to either continue using an estimate of forfeitures or account for forfeitures only when they occur. The guidance is effective for fiscal years beginning after December 15, 2016, including interim periods within those fiscal years. The Company is currently evaluating the impact of the guidance on its consolidated results of operations and financial condition.

2. PACIFIC ETHANOL CENTRAL PLANTS.

PE Central

On July 1, 2015, the Company acquired 100% of PE Central and, therefore, the Pacific Ethanol Central Plants, through a stock-for-stock merger. The Company issued an aggregate of 17.8 million shares of common stock and non-voting common stock for 100% of the outstanding shares of common stock of PE Central. The common stock and non-voting common stock issued as consideration had an aggregate fair value of $174.6 million, based on the closing market price of the Company's common stock on the acquisition date.

The Company believes the acquisition of PE Central resulted in a number of synergies and strategic advantages. The Company believes the acquisition spread commodity and basis price risks across diverse markets and products, assisting in its efforts to optimize margin management; improved its hedging opportunities with a greater correlation to the liquid physical and paper markets in Chicago; and increased its flexibility and alternatives in feedstock procurement for its Midwestern and Western production facilities. The acquisition also expanded the Company's marketing reach into new markets and extended its mix of co-products. The Company believes the acquisition enabled it to have deeper market insight and engagement in major ethanol and feed markets outside the Western United States, thereby improving pricing opportunities; allowed the Company to establish access to markets in 48 states for ethanol sales and access many markets with ethanol and co-product sales reaching domestic and international customers; and enabled it to use its more diverse mix of co-products to generate strong co-product returns.

The Company recognized the following allocation of the purchase price at fair values. The Company included in the following allocation its estimated fair values for certain operating lease agreements and open commitments. The fair-value determination of long-term debt was based on the interest rate environment at the acquisition date. Based on the final allocation, the Company recorded an immaterial bargain purchase gain on the acquisition.

The purchase price consideration allocation is as follows (in thousands):

Cash and cash equivalents	$	18,756
Accounts receivable		10,430
Inventory		29,483
Other current assets		8,304
Total current assets		66,973
Property and equipment		312,781
Net deferred tax assets		12,159
Other assets		750
Total assets acquired	$	392,663
Accounts payable and accrued liabilities	$	27,780
Long-term debt - revolvers		13,721
Long-term debt - term debt		142,744
Pension plan liabilities		8,518
Other non-current liabilities		25,327
Total liabilities	$	218,090
Net assets acquired	$	174,573

The contractual amount due on the accounts receivable acquired was $10.8 million, of which $0.4 million is expected to be uncollectible. In accounting for the acquisition, the Company recorded $3.7 million in other noncurrent liabilities as a litigation contingency related to certain litigation matters for amounts that were probable and estimable as of the acquisition date. Subsequent to the acquisition date, the Company settled for $2.1 million certain litigation for which liabilities were recorded. Certain of these settlements were made after the measurement period, and as such the Company recorded a gain of $1.1 million for the year ended December 31, 2016 in selling, general and administrative expenses in the accompanying consolidated statements of operations. See Note 15 for further details.

The following table presents unaudited pro forma financial information assuming the acquisition occurred on January 1, 2014 (in thousands except per share data).

	Years Ended December 31,	
	2015	2014
Net sales – pro forma	$ 1,484,676	$ 1,695,440
Cost of goods sold – pro forma	$ 1,469,512	$ 1,528,387
Selling, general and administrative expenses – pro forma	$ 34,735	$ 47,796
Net income (loss) – pro forma	$ (34,136)	$ 12,596
Diluted net income (loss) per share – pro forma	$ (0.81)	$ 0.31
Diluted weighted-average shares – pro forma	42,053	40,428

The effects of the initial step-up of inventories and open contracts in the aggregate of $8.7 million recorded during 2015 were excluded in the above amounts for 2015 and instead recorded for the year 2014 as if the acquisition had occurred on January 1, 2014. For the six months ended December 31, 2015, Aventine contributed $299.0 million in net sales and $16.3 million in pre-tax loss. For the year ended December 31, 2016, Aventine contributed $650.1 million in net sales and $2.1 million in pre-tax income. For the years ended December 31, 2015 and 2014, the Company recorded approximately $1.4 million and $0.7 million, respectively, in costs associated with the Aventine acquisition. These costs are reflected in selling, general and administrative expenses on the Company's consolidated statements of operations, but were excluded from the amounts above.

Pacific Aurora

On December 12, 2016, PE Central entered into a contribution agreement (the "Contribution Agreement") with ACEC under which (i) PE Central agreed to contribute to Pacific Aurora 100% of the equity interests of its wholly-owned subsidiaries, Pacific Ethanol Aurora East, LLC ("AE") and Pacific Ethanol Aurora West, LLC ("AW"), which own the Company's Aurora East and Aurora West ethanol plants, respectively, in exchange for an 88.15% ownership interest in Pacific Aurora, and (ii) ACEC agreed to contribute to Pacific Aurora its grain elevator adjacent to the Aurora East and Aurora West properties and related grain handling assets, including the outer rail loop and the real property on which they are located, in exchange for an 11.85% ownership interest in Pacific Aurora.

On December 15, 2016, concurrent with the closing of the contribution transaction, under the terms of a Unit Purchase Agreement, PE Central sold a 14.22% ownership interest in Pacific Aurora to ACEC for $30.0 million in cash. Following the closing under the Contribution Agreement and the Unit Purchase Agreement, PE Central owned 73.93% of Pacific Aurora and ACEC owned 26.07% of Pacific Aurora.

The Company has consolidated 100% of the results of Pacific Aurora and recorded the amount attributed to ACEC as noncontrolling interests under the voting rights model. Since the Company had control of AE and AW prior to forming Pacific Aurora, there was no gain or loss recorded on the contribution and ultimate sale of a portion of the Company's interests in Pacific Aurora. ACEC contributed $16.5 million in assets at fair market value and paid $30.0 million in cash for its additional ownership interests. A noncontrolling interest was recognized to reflect ACEC's proportional ownership interest multiplied by the book value of Pacific Aurora's net assets. As a result, the Company recorded $16.2 million as additional paid-in capital attributed to the difference between Pacific Aurora's book value and the contribution and sale.

On December 15, 2016, the Company entered into a working capital maintenance agreement with Pacific Aurora's lender, under which the Company agreed to contribute capital to Pacific Aurora from time to time, if needed, in an amount up to $15.0 million to ensure that Pacific Aurora maintains the minimum working capital thresholds required in its credit agreement as further discussed in Note 9. In addition, dividends from Pacific Aurora to its members are limited to 40% of Pacific Aurora's annual net income.

The carrying values and classification of assets and liabilities of Pacific Aurora as of December 31, 2016 were as follows (in thousands):

Cash and cash equivalents	$	1,453
Accounts receivable		16,804
Inventory		3,837
Other current assets		77
Total current assets		22,171
Property and equipment		115,759
Other assets		1,387
Total assets	$	139,317
Accounts payable and accrued liabilities	$	20,152
Other current liabilities		2,045
Long-term debt outstanding, net		621
Total liabilities	$	22,818

3. PACIFIC ETHANOL WEST PLANTS.

Since December 31, 2013, when the Company obtained a 91% ownership in PE Op Co, it purchased an additional 5% of the ownership interests in PE Op Co. in September 2014 for $6,000,000 in cash and purchased the remaining 4% ownership interest in PE Op Co. in May 2015, bringing its ownership of PE Op Co. to 100%.

Because the Company had a controlling financial interest in PE Op Co. at the time of these purchases, it did not record any gains or losses, but instead reduced the amount of noncontrolling interest on the consolidated balance sheets by an aggregate of $4,388,000 and $5,921,000 and recorded the difference of $560,000 and $79,000 for the years ended December 31, 2015 and 2014, respectively, which represents the fair value of these purchases above the price paid by the Company, to additional paid-in capital on the consolidated balance sheets. Further, in 2014, the Company recorded a deferred tax liability related to its cumulative adjustments to additional paid-in capital of $10,244,000.

4. INTERCOMPANY AGREEMENTS.

The Company, directly or through one of its subsidiaries, has entered into the following management and marketing agreements:

Affiliate Management Agreement – Pacific Ethanol entered into an Affiliate Management Agreement ("AMA") with its operating subsidiaries, namely Kinergy, PAP, the Pacific Ethanol West Plants and the Pacific Ethanol Central Plants, effective July 1, 2015, and with Pacific Aurora, effective December 15, 2016, under which Pacific Ethanol agreed to provide operational and administrative and staff support services. These services generally include, but are not limited to, administering the subsidiaries' compliance with their credit agreements and performing billing, collection, record keeping and other administrative and ministerial tasks. Pacific Ethanol agreed to supply all labor and personnel required to perform its services under the AMA, including the labor and personnel required to operate and maintain the production facilities and marketing activities. These services are billed at a predetermined amount per subsidiary each month plus out of pocket costs such as employee wages and benefits.

The AMAs have an initial term of one year and automatic successive one year renewal periods. In addition to typical conditions for a party to terminate the agreement prior to its expiration, Pacific Ethanol may terminate the AMA, and any subsidiary may terminate the AMA, at any time by providing at least 90 days prior notice of such termination.

Pacific Ethanol recorded revenues of approximately $12,968,000, $9,857,000 and $12,731,000 related to the AMAs in place for the years ended December 31, 2016, 2015 and 2014, respectively. These amounts have been eliminated upon consolidation.

Ethanol Marketing Agreements – Kinergy entered into separate ethanol marketing agreements with each of the Company's eight plants, which granted it the exclusive right to purchase, market and sell the ethanol produced at those facilities. Under the terms of the ethanol marketing agreements, within ten days after delivering ethanol to Kinergy, an amount is paid to Kinergy equal to (i) the estimated purchase price payable by the third-party purchaser of the ethanol, minus (ii) the estimated amount of transportation costs to be incurred, minus (iii) the estimated incentive fee payable to Kinergy, which equals 1% of the aggregate third-party purchase price, provided that the marketing fee shall not be less than $0.015 per gallon and not more than $0.0225 per gallon. Each of the ethanol marketing agreements had an initial term of one year and successive one year renewal periods at the option of the individual plant.

Kinergy recorded revenues of approximately $8,029,000, $5,262,000 and $3,986,000 related to the ethanol marketing agreements for the years ended December 31, 2016, 2015 and 2014, respectively. These amounts have been eliminated upon consolidation.

Corn Procurement and Handling Agreements – PAP entered into separate corn procurement and handling agreements with each of the Company's plants, with the exception of the Pacific Aurora facilities, which terminated its agreements with PAP on December 15, 2016. Under the terms of the corn procurement and handling agreements, each facility appointed PAP as its exclusive agent to solicit, negotiate, enter into and administer, on its behalf, corn supply arrangements to procure the corn necessary to operate its facility. PAP also provides grain handling services including, but not limited to, receiving, unloading and conveying corn into the facility's storage and, in the case of whole corn delivered, processing and hammering the whole corn.

Under these agreements, PAP receives a fee of $0.045 per bushel of corn delivered to each facility as consideration for its procurement and handling services, payable monthly. Effective December 15, 2016, this fee is $0.03 per bushel of corn. Each corn procurement and handling agreement had an initial term of one year and successive one year renewal periods at the option of the individual plant. PAP recorded revenues of approximately $4,386,000, $2,910,000 and $2,989,000 related to the corn procurement and handling agreements for the years ended December 31, 2016, 2015 and 2014, respectively. These amounts have been eliminated upon consolidation.

Effective December 15, 2016, each Pacific Aurora facility entered into a new grain procurement agreement with ACEC. Under this agreement, ACEC receives a fee of $0.03 per bushel of corn delivered to each facility as consideration for its procurement and handling services, payable monthly. The grain procurement agreement has an initial term of one year and successive one year renewal periods at the option of the individual plant. Pacific Aurora recorded expenses of approximately $107,000 for the period from December 15, 2016 to December 31, 2016. These amounts have not been eliminated upon consolidation as they are with a related but unconsolidated third-party.

Distillers Grains Marketing Agreements – PAP entered into separate distillers grains marketing agreements with each of the Company's plants, which grant PAP the exclusive right to market, purchase and sell the various co-products produced at each facility. Under the terms of the distillers grains marketing agreements, within ten days after a plant delivers co-products to PAP, the plant is paid an amount equal to (i) the estimated purchase price payable by the third-party purchaser of the co-products, minus (ii) the estimated amount of transportation costs to be incurred, minus (iii) the estimated amount of fees and taxes payable to governmental authorities in connection with the tonnage of the co-products produced or marketed, minus (iv) the estimated incentive fee payable to the Company, which equals (a) 5% of the aggregate third-party purchase price for wet corn gluten feed, wet distillers grains, corn condensed distillers solubles and distillers grains with solubles, or (b) 1% of the aggregate third-party purchase price for corn gluten meal, dry corn gluten feed, dry distillers grains, corn germ and corn oil. Each distillers grains marketing agreement had an initial term of one year and successive one year renewal periods at the option of the individual plant.

PAP recorded revenues of approximately $6,047,000, $4,438,000 and $4,788,000 related to the distillers grains marketing agreements for the years ended December 31, 2016, 2015 and 2014, respectively. These amounts have been eliminated upon consolidation.

5. SEGMENTS.

The Company reports its financial and operating performance in two segments: (1) ethanol production, which includes the production and sale of ethanol and co-products, with all of the Company's production facilities aggregated, and (2) marketing and distribution, which includes marketing and merchant trading for Company-produced ethanol and co-products and third-party ethanol.

Income before provision for income taxes includes management fees charged by Pacific Ethanol to the segment. The production segment incurred $9,968,000, $5,957,000 and $8,776,000 in management fees for the years ended December 31, 2016, 2015 and 2014, respectively. The marketing and distribution segment incurred $3,000,000, $3,900,000 and $3,900,000 in management fees for the years ended December 31, 2016, 2015 and 2014, respectively. Corporate activities include selling, general and administrative expenses, consisting primarily of corporate employee compensation, professional fees and overhead costs not directly related to a specific operating segment.

During the normal course of business, the segments do business with each other. The preponderance of this activity occurs when the Company's marketing segment markets ethanol produced by the production segment for a marketing fee, as discussed in Note 4. These intersegment activities are considered arms'-length transactions. Consequently, although these transactions impact segment performance, they do not impact the Company's consolidated results since all revenues and corresponding costs are eliminated in consolidation.

Capital expenditures are substantially all incurred at the Company's production segment.

The following tables set forth certain financial data for the Company's operating segments (in thousands):

	Years Ended December 31,		
	2016	2015	2014
Net Sales			
Ethanol Production:			
Net sales to external customers	$ 1,045,807	$ 710,201	$ 562,388
Intersegment net sales	1,169	–	–
Total production segment net sales	1,046,976	710,201	562,388
Marketing and distribution:			
Net sales to external customers	578,951	480,975	545,024
Intersegment net sales	8,029	5,262	3,986
Total marketing and distribution net sales	586,980	486,237	549,010
Intersegment eliminations	(9,198)	(5,262)	(3,986)
Net sales as reported	$ 1,624,758	$ 1,191,176	$ 1,107,412

Cost of goods sold:			
Ethanol production	$ 1,018,181	$ 719,833	$ 473,598
Marketing and distribution	575,921	476,410	537,010
Intersegment eliminations	(21,176)	(12,477)	(11,681)
Cost of goods sold as reported	$ 1,572,926	$ 1,183,766	$ 998,927
Income (loss) before provision for income taxes:			
Ethanol production	$ (6,882)	$ (32,723)	$ 72,278
Marketing and distribution	4,517	3,200	6,068
Corporate activities	2,910	616	(37,207)
	$ 545	$ (28,907)	$ 41,139
Depreciation and amortization:			
Ethanol production	$ 34,528	$ 23,091	$ 12,509
Marketing and distribution	3	151	551
Corporate activities	910	390	126
	$ 35,441	$ 23,632	$ 13,186
Interest expense:			
Ethanol production	$ 20,794	$ 11,969	$ 7,048
Marketing and distribution	1,404	625	566
Corporate activities	208	–	1,824
	$ 22,406	$ 12,594	$ 9,438

The following table sets forth the Company's total assets by operating segment (in thousands):

	December 31,	
	2016	2015
Total assets:		
Ethanol production	$ 542,688	$ 535,583
Marketing and distribution	146,356	107,499
Corporate assets	19,194	31,598
	$ 708,238	$ 674,680

6. PROPERTY AND EQUIPMENT.

Property and equipment consisted of the following (in thousands):

	December 31,	
	2016	2015
Facilities and plant equipment	$ 530,735	$ 501,800
Land	7,771	7,541
Other equipment, vehicles and furniture	9,714	9,084
Construction in progress	29,393	23,579
	577,613	542,004
Accumulated depreciation	(112,423)	(77,044)
	$ 465,190	$ 464,960

Depreciation expense, including idled facilities, was $35,441,000, $23,524,000 and $12,712,000 for the years ended December 31, 2016, 2015 and 2014, respectively. One of the Pacific Ethanol West Plants was idled for four months in 2014, as to which $699,000 of depreciation expense was recorded.

For the year ended December 31, 2015, the Company recorded an impairment charge of $1,970,000 related to the abandonment of certain accounting and information technology systems following the integration of its PE Central facilities.

For the year ended December 31, 2016, the Company capitalized interest of $1,307,000 related to its capital investment activities. Of this amount, approximately $640,000 related to project activity in the prior year, which the Company considered to be immaterial; therefore, this amount was corrected on a cumulative basis in the current period.

7. INTANGIBLE ASSETS.

Intangible assets consisted of the following (in thousands):

	Useful Life (Years)	December 31, 2016			December 31, 2015		
		Gross	Accumulated Amortization	Net Book Value	Gross	Accumulated Amortization	Net Book Value
Non-Amortizing:							
Kinergy tradename		$ 2,678	$ -	$ 2,678	$ 2,678	$ -	2,678
Amortizing:							
Customer relationships	10	4,741	(4,741)	–	4,741	(4,741)	–
Total intangible assets, net		$ 7,419	$ (4,741)	$ 2,678	$ 7,419	$ (4,741)	2,678

Kinergy Tradename – The Company recorded a tradename valued at $2,678,000 in 2006 as part of its acquisition of Kinergy. The Company determined that the Kinergy tradename has an indefinite life and therefore, rather than being amortized, will be tested annually for impairment. The Company did not record any impairment of the Kinergy tradename for the years ended December 31, 2016, 2015 and 2014.

Customer Relationships – The Company recorded customer relationships valued at $4,741,000 as part of its acquisition of Kinergy. The Company established a useful life of ten years for these customer relationships. Amortization expense associated with intangible assets totaled $0, $108,000 and $474,000 for the years ended December 31, 2016, 2015 and 2014, respectively.

8. DERIVATIVES.

The business and activities of the Company expose it to a variety of market risks, including risks related to changes in commodity prices. The Company monitors and manages these financial exposures as an integral part of its risk management program. This program recognizes the unpredictability of financial markets and seeks to reduce the potentially adverse effects that market volatility could have on operating results.

Commodity Risk – Cash Flow Hedges – The Company uses derivative instruments to protect cash flows from fluctuations caused by volatility in commodity prices for periods of up to twelve months in order to protect gross profit margins from potentially adverse effects of market and price volatility on ethanol sale and purchase commitments where the prices are set at a future date and/or if the contracts specify a floating or index-based price for ethanol. In addition, the Company hedges anticipated sales of ethanol to minimize its exposure to the potentially adverse effects of price volatility. These derivatives may be designated and documented as cash flow hedges and effectiveness is evaluated by assessing the probability of the anticipated transactions and regressing commodity futures prices against the Company's purchase and sales prices. Ineffectiveness, which is defined as the degree to which the derivative does not offset the underlying exposure, is recognized immediately in cost of goods sold. For the years ended December 31, 2016, 2015 and 2014, the Company did not designate any of its derivatives as cash flow hedges.

Commodity Risk – Non-Designated Hedges – The Company uses derivative instruments to lock in prices for certain amounts of corn and ethanol by entering into exchange-traded forward contracts for those commodities. These derivatives are not designated for special hedge accounting treatment. The changes in fair value of these contracts are recorded on the balance sheet and recognized immediately in cost of goods sold. The Company recognized net losses of $1,984,000, $542,000 and $808,000 as the change in the fair value of these contracts for the years ended December 31, 2016, 2015 and 2014, respectively.

Non Designated Derivative Instruments – The classification and amounts of the Company's derivatives not designated as hedging instruments are as follows (in thousands):

	As of December 31, 2016			
	Assets		Liabilities	
Type of Instrument	Balance Sheet Location	Fair Value	Balance Sheet Location	Fair Value
Commodity contracts	Derivative assets	$ 978	Derivative liabilities	$ 4,115
		$ 978		$ 4,115

	As of December 31, 2015			
	Assets		Liabilities	
Type of Instrument	Balance Sheet Location	Fair Value	Balance Sheet Location	Fair Value
Commodity contracts	Derivative assets	$ 2,081	Derivative liabilities	$ 1,848
		$ 2,081		$ 1,848

The classification and amounts of the Company's recognized gains (losses) for its derivatives not designated as hedging instruments are as follows (in thousands):

		Realized Gains (Losses)		
		For the Years Ended December 31,		
Type of Instrument	Statements of Operations Location	2016	2015	2014
Commodity contracts	Cost of goods sold	$ 1,386	$ (338)	$ (1,144)
		$ 1,386	$ (338)	$ (1,144)

		Unrealized Gains (Losses)		
		For the Years Ended December 31,		
Type of Instrument	Statements of Operations Location	2016	2015	2014
Commodity contracts	Cost of goods sold	$ (3,370)	$ (204)	$ 336
		$ (3,370)	$ (204)	$ 336

9. DEBT.

Long-term borrowings are summarized as follows (in thousands):

	December 31, 2016	December 31, 2015
Kinergy line of credit	$ 49,862	$ 61,003
Pekin term loan	64,000	–
Pekin revolving loan	32,000	–
Pacific Aurora line of credit	1,000	–
Parent notes payable	55,000	–
PE Central term debt	–	162,622
	201,862	223,625
Less unamortized debt discount	(1,626)	(2,299)
Less unamortized debt financing costs	(1,708)	(462)
Less short-term portion	(10,500)	(17,003)
Long-term debt	$ 188,028	$ 203,861

Kinergy Line of Credit – Kinergy has an operating line of credit for an aggregate amount of up to $85,000,000 with an "accordion" feature to further increase the maximum credit under the credit facility to up to $100,000,000 in minimum increments of $5,000,000 each, upon Kinergy's request, but subject to the consent of the agent and the lenders in their sole discretion. The line of credit matures on December 31, 2020. The credit facility is based on Kinergy's eligible accounts receivable and inventory levels, subject to certain concentration reserves. The credit facility is subject to certain other sublimits, including inventory loan limits. Interest accrues under the line of credit at a rate equal to (i) the three-month London Interbank Offered Rate ("LIBOR"), plus (ii) a specified applicable margin ranging between 1.75% and 2.75%. The applicable margin was 1.75%, for a total rate of 2.75% at December 31, 2016. The credit facility's monthly unused line fee is an annual rate equal to 0.25% to 0.375% depending on the average daily principal balance during the immediately preceding month. Payments that may be made by Kinergy to the Company as reimbursement for management and other services provided by the Company to Kinergy are limited under the terms of the credit facility to $1,500,000 per fiscal quarter.

The credit facility also includes the accounts receivable of PAP as additional collateral. Payments that may be made by PAP to the Company as reimbursement for management and other services provided by the Company to PAP are limited under the terms of the credit facility to $500,000 per fiscal quarter.

If Kinergy and PAP's monthly excess borrowing availability falls below certain thresholds, they are collectively required to maintain a fixed-charge coverage ratio (calculated as a twelve-month rolling EBITDA divided by the sum of interest expense, capital expenditures, principal payments of indebtedness, indebtedness from capital leases and taxes paid during such twelve-month rolling period) of at least 2.0 and are prohibited from incurring certain additional indebtedness (other than specific intercompany indebtedness).

Kinergy and PAP's obligations under the credit facility are secured by a first-priority security interest in all of their assets in favor of the lender. Pacific Ethanol has guaranteed all of Kinergy's obligations under the line of credit. As of December 31, 2016, Kinergy had an available borrowing base under the credit facility of $33,473,000.

Pekin Credit Facilities – On December 15, 2016, the Company's wholly-owned subsidiary, Pacific Ethanol Pekin, Inc. ("Pekin"), entered into a Credit Agreement (the "Pekin Credit Agreement") with 1st Farm Credit Services, PCA and CoBank, ACB ("CoBank"). On December 15, 2016, under the terms of the Pekin Credit Agreement, Pekin borrowed from 1st Farm Credit Services $64.0 million under a term loan facility that matures on August 20, 2021 (the "Pekin Term Loan") and $32.0 million under a revolving term loan facility that matures on February 1, 2022 (the "Pekin Revolving Loan" and, together with the Pekin Term Loan, the "Pekin Credit Facility"). The Pekin Credit Facility is secured by a first-priority security interest in all of Pekin's assets under the terms of a Security Agreement, dated December 15, 2016, by and between Pekin and CoBank (the "Pekin Security Agreement"). Interest accrues under the Pekin Credit Facility at an annual rate equal to the 30-day LIBOR plus 3.75%, payable monthly. Pekin is required to make quarterly principal payments in the amount of $3.5 million on the Pekin Term Loan beginning on May 20, 2017 and a principal payment of $4.5 million at maturity on August 20, 2021. Pekin is required to pay monthly in arrears a fee on any unused portion of the Pekin Revolving Loan at a rate of 0.75% per annum. Prepayment of the Pekin Credit Facility is subject to a prepayment penalty. Under the terms of the Pekin Credit Agreement, Pekin is required to maintain not less than $20.0 million in working capital and an annual debt coverage ratio of not less than 1.25 to 1.0. The Pekin Credit Agreement contains a variety of affirmative covenants, negative covenants and events of default which are customary for transactions of this type.

Pacific Aurora Line of Credit – On December 15, 2016, Pacific Aurora entered into a credit agreement (the "Pacific Aurora Credit Agreement") with CoBank. Under the terms of the Pacific Aurora Credit Agreement, Pacific Aurora may borrow up to $30.0 million under a revolving term loan facility from CoBank that matures on February 1, 2022 (the "Pacific Aurora Credit Facility"). The Pacific Aurora Credit Facility is secured by a first-priority security interest in all of Pacific Aurora's assets under the terms of a Security Agreement, dated December 15, 2016, by and among Pacific Aurora and CoBank (the "Pacific Aurora Security Agreement"). Borrowing availability under the Pacific Aurora Credit Facility automatically declines by $2.5 million on the first day of each June and December beginning on June 1, 2017 through and including December 1, 2020. Interest accrues under the Pacific Aurora Credit Facility at an annual rate equal to the 30-day LIBOR plus 4.0%, payable monthly. Pacific Aurora is required to pay monthly in arrears a fee on any unused portion of the Pacific Aurora Credit Facility at a rate of 0.75% per annum. Prepayment of the Pacific Aurora Credit Facility is subject to a prepayment penalty. Under the terms of the Pacific Aurora Credit Agreement, Pacific Aurora is required to maintain not less than $22.5 million in working capital through June 30, 2017, not less than $24.0 million in working capital after June 30, 2017, and an annual debt coverage ratio of not less than 1.5 to 1.0. At December 31, 2016, Pacific Aurora had $1,000,000 outstanding under the credit facility and $29,000,000 available for borrowing under the facility.

Pacific Ethanol, Inc. Notes Payable – On December 12, 2016, Pacific Ethanol entered into a Note Purchase Agreement (the "Note Purchase Agreement") with five accredited investors (the "Investors"). On December 15, 2016, under the terms of the Note Purchase Agreement, Pacific Ethanol sold $55.0 million in aggregate principal amount of its senior secured notes (the "Notes") to the Investors in a private offering (the "Note Transaction") for aggregate gross proceeds of 97% of the principal amount of the Notes sold. The Notes mature on December 15, 2019 (the "Maturity Date"). Interest on the Notes accrues at a rate equal to (i) the greater of 1% and the three-month LIBOR, plus 7.0% from the closing through December 14, 2017, (ii) the greater of 1% and LIBOR, plus 9% between December 15, 2017 and December 14, 2018, and (iii) the greater of 1% and LIBOR plus 11% between December 15, 2018 and the Maturity Date. The interest rate increases by an additional 2% per annum above the interest rate otherwise applicable upon the occurrence and during the continuance of an event of default until such event of default has been cured. Interest is payable in cash in arrears on the 15th calendar day of each March, June, September and December beginning on March 15, 2017. Pacific Ethanol is required to pay all outstanding principal and any accrued and unpaid interest on the Notes on the Maturity Date. Pacific Ethanol may, at its option, prepay the outstanding principal amount of the Notes at any time without premium or penalty. The Notes contain a variety of events of default which are typical for transactions of this type. The payments due under the Notes will rank senior to all other indebtedness of Pacific Ethanol, other than permitted senior indebtedness. The Notes contain a variety of obligations on the part of Pacific Ethanol not to engage in certain activities, which are typical for transactions of this type, including that (i) Pacific Ethanol and certain of its subsidiaries will not incur other indebtedness, except for certain permitted indebtedness, (ii) Pacific Ethanol and certain of its subsidiaries will not redeem, repurchase or pay any dividend or distribution on their respective capital stock without the prior consent of the holders of the Notes holding 66-2/3% of the aggregate principal amount of the Notes, other than certain permitted distributions, (iii) Pacific Ethanol and certain of its subsidiaries will not sell, lease, assign, transfer or otherwise dispose of any assets of Pacific Ethanol or any such subsidiary, except for certain permitted dispositions (including the sales of inventory or receivables in the ordinary course of business), and (iv) Pacific Ethanol and certain of its subsidiaries will not issue any capital stock or membership interests for any purpose other than to pay down a portion of all of the amounts owed under the Notes and in connection with Pacific Ethanol's stock incentive plans. The Notes are secured by a first-priority security interest in the equity interest held by Pacific Ethanol in its wholly-owned subsidiary, PE Op. Co., which indirectly owns the Company's plants located on the West Coast.

Pacific Ethanol West Plants' Term Debt – The Pacific Ethanol West Plants' debt as of December 31, 2015 consisted of a $17,003,000 tranche A-1 term loan which was to mature in June 2016. On February 26, 2016, the Company retired the $17,003,000 outstanding balance by purchasing the lender's position for cash at par without any prepayment penalty. The purchase increased the amount of the term debt held by Pacific Ethanol from $41,763,000 at December 31, 2015 to $58,766,000 at December 31, 2016, which is eliminated upon consolidation, as the Company has no continuing obligations to any third-party lender under the credit agreements associated with this term debt.

Pacific Ethanol Central Plants' Term Debt –On July 1, 2015, upon effectiveness of the PE Central acquisition, PE Central became a wholly-owned subsidiary of the Company and, on a consolidated basis, the combined company became obligated with respect to the Pacific Ethanol Central Plants' term loan and revolving credit facilities. In connection with the Company's allocation of purchase price, the debt was recorded at $142,744,000, net of a discount of $2,875,000. The term loan facility was to mature on September 24, 2017. The term loan facility was secured through a first-priority lien on substantially all of the Pacific Ethanol Central Plants' assets and contained customary financial covenants, including the requirement that PE Central maintain a cash balance of at least $2,000,000. As of December 31, 2015, the Pacific Ethanol Central Plants' term debt had an outstanding balance of $145,619,000.

Interest on the term loan facility accrued and could either be paid in cash at a rate of 10.5% per annum or paid in-kind at a rate of 15.0% per annum by adding such interest to the outstanding principal balance. The Company paid interest in cash for the period from July 1, 2015, the effective date of the PE Central acquisition, through December 31, 2015. During the year ended December 31, 2016, the Company elected to pay in-kind an aggregate of $9,451,000 of interest, which was added to the principal balance. As of December 15, 2016, the principal balance was $155,070,205. On December 15, 2016, the Company paid in full the outstanding principal balance and all accrued and unpaid interest. The Company did not pay any prepayment penalties. The Company fully amortized the remaining unamortized debt discount of $1,152,000 and recorded the amount in interest expense, net for the year ended December 31, 2016.

Maturities of Long-term Debt – The Company's long-term debt matures as follows (in thousands):

December 31:	
2017	$ 10,500
2018	14,000
2019	69,000
2020	63,862
2021	11,500
2022	33,000
	$ 201,862

At December 31, 2016, there were approximately $287,200,000 of net assets of the Company's subsidiaries that were not available to be transferred to Pacific Ethanol in the form of dividends, distributions, loans or advances due to restrictions contained in the credit facilities maintained by these subsidiaries.

10. PENSION PLANS.

Retirement Plan - The Company sponsors a defined benefit pension plan (the "Retirement Plan") that is noncontributory, and covers only "grandfathered" unionized employees at its Pekin, Illinois, facility. The Company assumed the Retirement Plan as part of its acquisition of PE Central on July 1, 2015. Benefits are based on a prescribed formula based upon the employee's years of service. On October 31, 2015, the Union ratified a new collective bargaining agreement with the Company for its hourly production workers in Pekin, Illinois. This new agreement was effective November 1, 2015. The revised amended agreement states that, among other things, employees hired after November 1, 2010, will not be eligible to participate in the Retirement Plan. The Company uses a December 31 measurement date for its Retirement Plan. The Company's funding policy is to make the minimum annual contribution required by applicable regulations.

Information related to the Retirement Plan as of and for the years ended December 31, 2016 and 2015 is presented below (dollars in thousands):

	2016	2015
Changes in plan assets:		
Fair value of plan assets, beginning	$ 12,567	$ 13,180
Actual gain (loss)	523	(298)
Benefits paid	(667)	(315)
Company contributions	–	–
Participant contributions	–	–
Fair value of plan assets, ending	$ 12,423	$ 12,567
Less: accumulated/projected benefit obligation	$ 18,455	$ 16,552
Funded status, (underfunded)/overfunded	$ (6,032)	$ (3,985)
Amounts recognized in the consolidated balance sheets:		
Other liabilities	$ (6,032)	$ (3,985)
Accumulated other comprehensive loss (income)	$ 1,047	$ (885)
Components of net periodic benefit costs are as follows:		
Service cost	$ 223	$ 211
Interest cost	686	338
Expected return on plan assets	(794)	(500)
Net periodic benefit cost	$ 115	$ 49
Loss (gain) recognized in other comprehensive income (expense)	$ 1,932	$ (885)

Assumptions used in computation benefit obligations:		
Discount rate	4.15%	4.23%
Expected long-term return on plan assets	6.75%	7.75%
Rate of compensation increase	–	–

The Company is not expected to make contributions in the year ending December 31, 2017. Expected net periodic benefit cost for 2017 is estimated at approximately $0.5 million.

The following table summarizes the expected benefit payments for the Company's plan for each of the next five fiscal years and in the aggregate for the five fiscal years thereafter (in thousands):

December 31:		
2017	$	750
2018		780
2019		790
2020		820
2021		830
2022-26		4,860
	$	8,830

See Note 16 for discussion of the plan’s fair value disclosures.

Historical and future expected returns of multiple asset classes were analyzed to develop a risk-free real rate of return and risk premiums for each asset class. The overall rate for each asset class was developed by combining a long-term inflation component, the risk-free real rate of return, and the associated risk premium. A weighted average rate was developed based on those overall rates and the target asset allocation of the plan.

The Company's pension committee is responsible for overseeing the investment of pension plan assets. The pension committee is responsible for determining and monitoring the appropriate asset allocations and for selecting or replacing investment managers, trustees, and custodians. The pension plan's current investment target allocations are 50% equities and 50% debt. The pension committee reviews the actual asset allocation in light of these targets periodically and rebalances investments as necessary. The pension committee also evaluates the performance of investment managers as compared to the performance of specified benchmarks and peers and monitors the investment managers to ensure adherence to their stated investment style and to the plan's investment guidelines.

Postretirement Plan - The Company also sponsors a health care plan and life insurance plan (the “Postretirement Plan”) that provides postretirement medical benefits and life insurance to certain “grandfathered” unionized employees. The Company assumed the Postretirement Plan as part of its acquisition of PE Central on July 1, 2015. Employees hired after December 31, 2000, are not eligible to participate in the Postretirement Plan. The plan is contributory, with contributions required at the same rate as active employees. Benefit eligibility under the plan reduces at age 65 from a defined benefit to a defined dollar cap based upon years of service.

Information related to the Postretirement Plan as of and for the years ended December 31, 2016 and 2015 are presented below (dollars in thousands):

	2016	2015
Amounts at the end of the year:		
Accumulated/projected benefit obligation	$ 5,371	$ 3,619
Fair value of plan assets	–	–
Funded status, (underfunded)/overfunded	$ (5,371)	$ (3,619)
Amounts recognized in the consolidated balance sheets:		
Accrued liabilities	$ (310)	$ (214)
Other liabilities	$ (5,061)	$ (3,405)
Accumulated other comprehensive loss (expense)	$ 1,573	$ (155)
Amounts recognized in the plan for the year:		
Company contributions	$ 163	$ 20
Participant contributions	$ 22	$ 15
Benefits paid	$ (184)	$ (35)
Components of net periodic benefit costs are as follows:		
Service cost	$ 48	$ 32
Interest cost	139	65
Net periodic benefit cost	$ 187	$ 97
Loss (gain) recognized in other comprehensive income	$ 1,728	$ (155)
Assumptions used in computation benefit obligations:		
Discount rate	3.95%	3.67%

The Company does not expect to recognize any amortization of net actuarial loss during the year ended December 31, 2017.

The following table summarizes the expected benefit payments for the Company's plan for each of the next five fiscal years and in the aggregate for the five fiscal years thereafter (in thousands):

December 31:	
2017	$ 310
2018	290
2019	320
2020	300
2021	320
2022-26	1,890
	$ 3,430

For purposes of determining the cost and obligation for pre-Medicare postretirement medical benefits, a 7.0% annual rate of increase in the per capita cost of covered benefits (i.e., health care trend rate) was assumed for the plan in 2017, adjusting to a rate of 4.5% in 2025. Assumed health care cost trend rates have a significant effect on the amounts reported for health care plans.

11. INCOME TAXES.

The Company recorded a provision (benefit) for income taxes as follows (in thousands):

	Years Ended December 31,		
	2016	2015	2014
Current provision (benefit)	$ 141	$ (8,011)	$ 11,040
Deferred provision (benefit)	(1,122)	(2,023)	4,097
Total	$ (981)	$ (10,034)	$ 15,137

A reconciliation of the differences between the United States statutory federal income tax rate and the effective tax rate as provided in the consolidated statements of operations is as follows:

	Years Ended December 31,		
	2016	2015	2014
Statutory rate	35.0%	35.0%	35.0%
State income taxes, net of federal benefit	6.4	9.2	10.0
Change in valuation allowance	(298.8)	(4.2)	(11.5)
Fair value adjustments and warrant inducements	37.2	2.0	31.8
Domestic production gross receipts deduction	–	(2.9)	(2.0)
Section 382 reduction to loss carryover	–	0.1	(24.2)
Stock compensation	58.8	(0.8)	–
Non-deductible items	8.9	(0.5)	0.6
Change in tax status of subsidiary	–	–	(1.6)
Other	(27.5)	(3.2)	(1.3)
Effective rate	(180.0)%	34.7%	36.8%

Deferred income taxes are provided using the asset and liability method to reflect temporary differences between the financial statement carrying amounts and the tax bases of assets and liabilities using presently enacted tax rates and laws. The components of deferred income taxes included in the consolidated balance sheets were as follows (in thousands):

	December 31,	
	2016	2015
Deferred tax assets:		
Net operating loss carryforwards	$ 45,709	$ 53,867
Railcar contracts	3,348	5,143
Pension liability	2,204	2,647
R&D and AMT credits	2,465	2,303
Derivatives	1,228	–
Litigation accrual	–	1,290
Capital leases	–	1,021
Stock-based compensation	946	724
Allowance for doubtful accounts and other assets	856	–
Other	4,316	5,367
Total deferred tax assets	61,072	72,362
Deferred tax liabilities:		
Fixed assets	(45,757)	(30,272)
Intangibles	(1,091)	(1,091)
Debt basis	–	(912)
Other	(1,593)	(1,423)
Total deferred tax liabilities	(48,441)	(33,698)
Valuation allowance	(12,683)	(39,838)
Net deferred tax liabilities	$ (52)	$ (1,174)
Classified in balance sheet as:		
Other liabilities	$ (52)	$ (1,174)

A portion of the Company's net operating loss carryforwards will be subject to provisions of the tax law that limit the use of losses incurred by a company prior to the date certain ownership changes occur. Due to the limitation, a significant portion of these net operating loss carryforwards will expire regardless of whether the Company generates future taxable income. After reducing these net operating loss carryforwards for the amount which will expire due to this limitation, the Company had remaining federal net operating loss carryforwards of approximately $117,683,000 and state net operating loss carryforwards of approximately $101,838,000 at December 31, 2016. These net operating loss carryforwards expire as follows (in thousands):

Tax Years	Federal	State
2017–2021	$ –	$ 22,425
2022–2026	3,781	4,109
2027–2031	1,654	30,102
2032–2036	112,248	45,202
	$ 117,683	$ 101,838

Certain of these net operating losses are not immediately available, but become available to be utilized in each of the years ended December 31, as follows (in thousands):

Year	Federal	State
2017	$ 16,328	$ 40,037
2018	6,441	4,809
2019	6,441	4,809
2020	6,374	4,781
2021	6,308	4,754
Thereafter	75,791	42,648
	$ 117,683	$ 101,838

To the extent amounts are not utilized in any year, they may be carried forward to the next year until expiration. These amounts may change if there are future additional limitations on their utilization.

In assessing whether the deferred tax assets are realizable, a more likely than not standard is applied. If it is determined that it is more likely than not that deferred tax assets will not be realized, a valuation allowance must be established against the deferred tax assets. The ultimate realization of deferred tax assets is dependent upon the generation of future taxable income during the periods in which the associated temporary differences become deductible. Management considers the scheduled reversal of deferred tax liabilities, projected future taxable income and tax planning strategies in making this assessment.

A valuation allowance was established in the amount of $12,683,000, $39,838,000 and $4,147,000 at December 31, 2016, 2015 and 2014, respectively, based on the Company's assessment of the future realizability of certain deferred tax assets. For the year ended December 31, 2015, the Company recorded an increase in the valuation allowance of $35,691,000, including $34,469,000 related to the acquisition of PE Central. For the year ended December 31, 2016, the Company recorded a decrease in the valuation allowance of $27,155,000, including approximately $13,500,000 related to finalization of the deferred tax attributes of PE Central at the date of acquisition, and approximately $11,500,000 related to the sale of a noncontrolling interest in Pacific Aurora. During the year ended December 31, 2015, the Company recognized $1,500,000 in tax benefit related to adjustments to its tax asset valuation allowance from a prior year. The valuation allowance on deferred tax assets is related to future deductible temporary differences and net operating loss carryforwards (exclusive of net operating losses associated with items recorded directly to equity) for which the Company has concluded it is more likely than not that these items will not be realized in the ordinary course of operations.

At December 31, 2016, the Company had no increase or decrease in unrecognized income tax benefits for the year as a result of uncertain tax positions taken in a prior or current period. There was no accrued interest or penalties relating to tax uncertainties at December 31, 2016. Unrecognized tax benefits are not expected to increase or decrease within the next twelve months.

The Company is subject to income tax in the United States federal jurisdiction and various state jurisdictions and has identified its federal tax return and tax returns in state jurisdictions below as "major" tax filings. These jurisdictions, along with the years still open to audit under the applicable statutes of limitation, are as follows:

Jurisdiction	Tax Years
Federal	2013 – 2015
Arizona	2013 – 2015
California	2012 – 2015
Colorado	2012 – 2015
Idaho	2013 – 2015
Illinois	2013 – 2015
Indiana	2013 – 2015
Iowa	2013 – 2015
Kansas	2014 – 2015
Minnesota	2014 – 2015
Missouri	2014 – 2015
Nebraska	2013 – 2015
Oklahoma	2014 – 2015
Oregon	2013 – 2015
Texas	2012 – 2015

However, because the Company had net operating losses and credits carried forward in several of the jurisdictions, including the United States federal and California jurisdictions, certain items attributable to closed tax years are still subject to adjustment by applicable taxing authorities through an adjustment to tax attributes carried forward to open years.

12. PREFERRED STOCK.

The Company has 6,734,835 undesignated shares of authorized and unissued preferred stock, which may be designated and issued in the future on the authority of the Company's Board of Directors. As of December 31, 2016, the Company had the following designated preferred stock:

Series A Preferred Stock – The Company has authorized 1,684,375 shares of Series A Cumulative Redeemable Convertible Preferred Stock ("Series A Preferred Stock"), with none outstanding at December 31, 2016 and 2015. Shares of Series A Preferred Stock that are converted into shares of the Company's common stock revert to undesignated shares of authorized and unissued preferred stock.

Upon any issuance, the Series A Preferred Stock would rank senior in liquidation and dividend preferences to the Company's common stock. Holders of Series A Preferred Stock would be entitled to quarterly cumulative dividends payable in arrears in cash in an amount equal to 5% per annum of the purchase price per share of the Series A Preferred Stock. The holders of the Series A Preferred Stock would have conversion rights initially equivalent to two shares of common stock for each share of Series A Preferred Stock, subject to customary antidilution adjustments. Certain specified issuances will not result in antidilution adjustments. The shares of Series A Preferred Stock would also be subject to forced conversion upon the occurrence of a transaction that would result in an internal rate of return to the holders of the Series A Preferred Stock of 25% or more. Accrued but unpaid dividends on the Series A Preferred Stock are to be paid in cash upon any conversion of the Series A Preferred Stock.

The holders of Series A Preferred Stock would have a liquidation preference over the holders of the Company's common stock equivalent to the purchase price per share of the Series A Preferred Stock plus any accrued and unpaid dividends on the Series A Preferred Stock. A liquidation would be deemed to occur upon the happening of customary events, including transfer of all or substantially all of the Company's capital stock or assets or a merger, consolidation, share exchange, reorganization or other transaction or series of related transactions, unless holders of 66 2/3% of the Series A Preferred Stock vote affirmatively in favor of or otherwise consent to such transaction.

Series B Preferred Stock – The Company has authorized 1,580,790 shares of Series B Cumulative Convertible Preferred Stock ("Series B Preferred Stock"), with 926,942 shares outstanding at December 31, 2016 and 2015. Shares of Series B Preferred Stock that are converted into shares of the Company's common stock revert to undesignated shares of authorized and unissued preferred stock.

The Series B Preferred Stock ranks senior in liquidation and dividend preferences to the Company's common stock. Holders of Series B Preferred Stock are entitled to quarterly cumulative dividends payable in arrears in cash in an amount equal to 7.00% per annum of the purchase price per share of the Series B Preferred Stock; however, subject to the provisions of the Letter Agreement described below, such dividends may, at the option of the Company, be paid in additional shares of Series B Preferred Stock based initially on the liquidation value of the Series B Preferred Stock. In addition to the quarterly cumulative dividends, holders of the Series B Preferred Stock are entitled to participate in any common stock dividends declared by the Company to its common stockholders. The holders of Series B Preferred Stock have a liquidation preference over the holders of the Company's common stock initially equivalent to $19.50 per share of the Series B Preferred Stock plus any accrued and unpaid dividends on the Series B Preferred Stock. A liquidation will be deemed to occur upon the happening of customary events, including the transfer of all or substantially all of the capital stock or assets of the Company or a merger, consolidation, share exchange, reorganization or other transaction or series of related transaction, unless holders of 66 2/3% of the Series B Preferred Stock vote affirmatively in favor of or otherwise consent that such transaction shall not be treated as a liquidation. The Company believes that such liquidation events are within its control and therefore has classified the Series B Preferred Stock in stockholders' equity.

As of December 31, 2016, the Series B Preferred Stock was convertible into 634,641 shares of the Company's common stock. The conversion ratio is subject to customary antidilution adjustments. In addition, antidilution adjustments are to occur in the event that the Company issues equity securities, including derivative securities convertible into equity securities (on an as-converted or as-exercised basis), at a price less than the conversion price then in effect. The shares of Series B Preferred Stock are also subject to forced conversion upon the occurrence of a transaction that would result in an internal rate of return to the holders of the Series B Preferred Stock of 25% or more. The forced conversion is to be based upon the conversion ratio as last adjusted. Accrued but unpaid dividends on the Series B Preferred Stock are to be paid in cash upon any conversion of the Series B Preferred Stock.

The holders of Series B Preferred Stock vote together as a single class with the holders of the Company's common stock on all actions to be taken by the Company's stockholders. Each share of Series B Preferred Stock entitles the holder to approximately 0.03 votes per share on all matters to be voted on by the stockholders of the Company. Notwithstanding the foregoing, the holders of Series B Preferred Stock are afforded numerous customary protective provisions with respect to certain actions that may only be approved by holders of a majority of the shares of Series B Preferred Stock.

In 2008, the Company entered into Letter Agreements with Lyles United LLC ("Lyles United") and other purchasers under which the Company expressly waived its rights under the Certificate of Designations relating to the Series B Preferred Stock to make dividend payments in additional shares of Series B Preferred Stock in lieu of cash dividend payments without the prior written consent of Lyles United and the other purchasers.

Registration Rights Agreement – In connection with the sale of its Series B Preferred Stock, the Company entered into a registration rights agreement with Lyles United. The registration rights agreement is to be effective until the holders of the Series B Preferred Stock, and their affiliates, as a group, own less than 10% for each of the series issued, including common stock into which such Series B Preferred Stock has been converted. The registration rights agreement provides that holders of a majority of the Series B Preferred Stock, including common stock into which such Series B Preferred Stock has been converted, may demand and cause the Company to register on their behalf the shares of common stock issued, issuable or that may be issuable upon conversion of the Preferred Stock and as payment of dividends thereon, and upon exercise of the related warrants (collectively, the "Registrable Securities"). The Company is required to keep such registration statement effective until such time as all of the Registrable Securities are sold or until such holders may avail themselves of Rule 144 for sales of Registrable Securities without registration under the Securities Act of 1933, as amended. The holders are entitled to two demand registrations on Form S-1 and unlimited demand registrations on Form S-3; provided, however, that the Company is not obligated to effect more than one demand registration on Form S-3 in any calendar year. In addition to the demand registration rights afforded the holders under the registration rights agreement, the holders are entitled to unlimited "piggyback" registration rights. These rights entitle the holders who so elect to be included in registration statements to be filed by the Company with respect to other registrations of equity securities. The Company is responsible for all costs of registration, plus reasonable fees of one legal counsel for the holders, which fees are not to exceed $25,000 per registration. The registration rights agreement includes customary representations and warranties on the part of both the Company and the holders and other customary terms and conditions.

The Company accrued and paid in cash preferred stock dividends of $1,269,000, $1,265,000 and $1,265,000 for the years ended December 31, 2016, 2015 and 2014, respectively.

For the years ended December 31, 2011, 2010 and 2009, the Company accrued but did not pay any preferred stock dividends. Beginning in 2012, the Company entered into a series of agreements with the parties to whom unpaid dividends were owed under which the Company issued shares of its common stock in satisfaction of a portion of the accrued and unpaid dividends. In connection with each payment of accrued and unpaid dividends, the payees agreed to forebear for a term from exercising any rights they may have with the respect to accrued and unpaid dividends. In 2014, the Company paid the last two installments in cash. The following table summarizes the details of the Company's payments to the holders of its Series B Preferred Stock:

Agreement/Payment Date	Amount of Dividends Paid	Shares of Common Stock Issued	Extended Forbearance Date
August 12, 2012	$ 732,000	157,000	January 1, 2014
December 26, 2012	732,000	144,500	June 30, 2014
March 27, 2013	732,000	139,000	September 30, 2014
July 26, 2013	731,000	175,000	December 31, 2014
September 17, 2013	731,000	197,000	March 31, 2015
May 23, 2014	1,463,000	120,000	November 30, 2015
November 24, 2014	1,000,000	–	
December 23, 2014	1,194,000	–	
Total	$ 7,315,000	932,500	

13. COMMON STOCK AND WARRANTS.

The following table summarizes warrant activity for the years ended December 31, 2015, 2014 and 2013 (number of shares in thousands):

	Number of Shares	Price per Share	Weighted Average Exercise Price
Balance at December 31, 2013	8,275	$5.47 – $735.00	$ 10.04
Warrants exercised	(6,615)	$6.09 – $8.85	$ 7.17
Warrants expired	(804)	$5.47	$ 5.47
Balance at December 31, 2014	856	$6.09 – $735.00	$ 36.55
Warrants exercised	(42)	$8.85	$ 8.85
Warrants expired	(432)	$8.85	$ 8.85
Balance at December 31, 2015	382	$6.09 – $735.00	$ 70.87
Warrants exercised	(138)	$8.43	$ 8.43
Balance at December 31, 2016	244	$6.09 – $735.00	$ 106.22

July 2012 Public Offering – On July 3, 2012, the Company raised $10,903,000, net of $1,137,000 of underwriting fees and issuance costs, through a public offering of units consisting of an aggregate of 1,867,000 shares of common stock, warrants immediately exercisable to purchase an aggregate of 1,867,000 shares of common stock at an exercise price of $9.45 per share and which expire in 2017 ("Series I Warrants") and warrants immediately exercisable to purchase an aggregate of 933,000 shares of common stock at an exercise price of $7.95 per share and which expired in 2014 ("Series II Warrants"). The Series I Warrants are, and the Series II Warrants were, subject to "weighted-average" anti-dilution adjustments if the Company issues or is deemed to have issued securities at a price lower than their then applicable exercise prices. Due to subsequent transactions, the exercise price of the Series I Warrants was reduced to $6.09 per share and the exercise price of the Series II Warrants was reduced to $5.47 per share. The Company accounted for the net proceeds of the offering by first allocating the $3,380,000 fair value of the warrants to liabilities and then allocating the remaining amount to equity. The Series II Warrants expired unexercised. As of December 31, 2016, Series I Warrants to purchase 211,000 shares of common stock remained outstanding.

Warrant Inducements – During 2014, certain holders exercised warrants and received payments from the Company in the aggregate amounts of $2,271,000 in cash as an inducement for these exercises, which were recorded as an expense. There were no warrant inducements in 2016 and 2015.

Warrant Terms – The exercise prices of the outstanding warrants described above are subject to adjustment for stock splits, combinations or similar events, and, in such event, the number of shares issuable upon the exercise of the warrants will also be adjusted so that the aggregate exercise price shall be the same immediately before and immediately after the adjustment. The warrants generally require payments to be made by the Company for failure to deliver the shares of common stock issuable upon exercise. The warrants may not be exercised if, after giving effect to the exercise, the investor together with its affiliates would beneficially own in excess of 4.99% of the Company's outstanding shares of common stock. The blocker applicable to the exercise of the warrants may be raised or lowered to any other percentage not in excess of 9.99%, except that any increase will only be effective upon 61-days' prior notice to the Company. If the Company issues options, convertible securities, warrants, stock, or similar securities to holders of its common stock generally, each holder of certain warrants has the right to acquire the same securities as if the holder had exercised its warrants. The warrants prohibit the Company from entering into specified transactions involving a change of control, unless the successor entity assumes all of the Company's obligations under the warrants under a written agreement before the transaction is completed. When there is a transaction involving a permitted change of control, a holder of a warrant will have the right to force the Company to repurchase the holder's warrant for a purchase price in cash equal to the Black-Scholes value (as calculated under the individual warrant agreements) of the then unexercised portion of the warrant.

Accounting for Warrants – The Company has determined that the warrants issued in the above transaction did not meet the conditions for classification in stockholders' equity and as such, the Company has recorded them as a liability at fair value. The Company will revalue them at each reporting period. Further, as noted above, certain of the exercise prices declined as a result of the anti-dilution adjustments due to subsequent transactions. Accordingly, the Company recorded fair value adjustments quarterly, with total fair value adjustments of $1,641,000 of income for the year ended December 31, 2015 and $557,000 and $35,260,000 of expense for the years ended December 31, 2016 and 2014, respectively, which is largely attributed to adjustment, if any, to their exercise prices, term shortening and changes in the market value of the Company's common stock. See Note 16 for the Company's fair value assumptions.

Registration Rights Agreements – In connection with the above issuance, the Company entered into a registration rights agreements with all of the investors to file registration statements on Form S-1 or S-3 with the Securities and Exchange Commission by certain dates for the resale by the purchasers of the shares of common stock issued and the shares of common stock issuable upon exercise of the warrants. Subject to customary grace periods, the Company is required to keep the registration statements (and the accompanying prospectuses) available for use for resale by the investors on a delayed or continuous basis at then-prevailing market prices at all times until the earlier of (i) the date as of which all of the investors may sell all of the shares of common stock required to be covered by the registration statement without restriction under Rule 144 under the Securities Act of 1933, as amended (including volume restrictions) and without the need for current public information required by Rule 144(c)(1), if applicable) or (ii) the date on which the investors have sold all of the shares of common stock covered by the registration statement. The Company must pay registration delay payments of up to 2% of each investor's initial investment per month if the registration statement ceases to be effective prior to the expiration of deadlines provided for in the registration rights agreement. The initial registration statements became effective by the stated deadlines and the Company did not record any liability associated with any registration delay payments under the registration rights agreements.

14. STOCK-BASED COMPENSATION.

The Company has two equity incentive compensation plans: a 2006 Stock Incentive Plan and a 2016 Stock Incentive Plan.

2006 Stock Incentive Plan – The 2006 Stock Incentive Plan authorized the issuance of incentive stock options ("ISOs") and non-qualified stock options ("NQOs"), restricted stock, restricted stock units, stock appreciation rights, direct stock issuances and other stock-based awards to the Company's officers, directors or key employees or to consultants that do business with the Company for up to an aggregate of 1,715,000 shares of common stock. In June 2016, this plan was terminated, except to the extent of issued and outstanding unvested stock awards and options.

2016 Stock Incentive Plan – On June 16, 2016, the Company's shareholders approved the 2016 Stock Incentive Plan, which authorizes the issuance of ISOs, NQOs, restricted stock, restricted stock units, stock appreciation rights, direct stock issuances and other stock-based awards to the Company's officers, directors or key employees or to consultants that do business with the Company for up to an aggregate of 1,150,000 shares of common stock.

Stock Options – Summaries of the status of Company's stock option plans as of December 31, 2016 and 2015 and of changes in options outstanding under the Company's plans during those years are as follows (number of shares in thousands):

	Years Ended December 31,			
	2016		2015	
	Number of Shares	Weighted Average Exercise Price	Number of Shares	Weighted Average Exercise Price
Outstanding at beginning of year	240	$ 4.18	241	$ 6.91
Expired	–	–	(1)	867.24
Outstanding at end of year	240	$ 4.18	240	$ 4.18
Options exercisable at end of year	240	$ 4.18	164	$ 4.18

Stock options outstanding as of December 31, 2016 were as follows (number of shares in thousands):

	Options Outstanding			Options Exercisable	
Range of Exercise Prices	Number Outstanding	Weighted Average Remaining Contractual Life (yrs.)	Weighted Average Exercise Price	Number Exercisable	Weighted Average Exercise Price
$3.74	229	6.47	$3.74	229	$3.74
$12.90	11	4.59	$12.90	11	$12.90

The options outstanding at December 31, 2016 and 2015 had intrinsic values of $1,319,000 and $238,000, respectively.

Restricted Stock – The Company granted to certain employees and directors shares of restricted stock under its 2006 and 2016 Stock Incentive Plans. A summary of unvested restricted stock activity is as follows (shares in thousands):

	Number of Shares	Weighted Average Grant Date Fair Value Per Share
Unvested at December 31, 2013	472	$ 5.07
Issued	155	$ 15.23
Vested	(227)	$ 5.79
Canceled	(10)	$ 4.30
Unvested at December 31, 2014	390	$ 8.71
Issued	307	$ 10.16
Vested	(220)	$ 7.94
Canceled	(14)	$ 10.08
Unvested at December 31, 2015	463	$ 10.00
Issued	742	$ 5.24
Vested	(250)	$ 9.01
Canceled	(25)	$ 6.24
Unvested at December 31, 2016	930	$ 6.57

The fair value of the common stock at vesting aggregated $1,142,000, $2,603,000 and $3,858,000 for the years ended December 31, 2016, 2015 and 2014, respectively. Stock-based compensation expense related to employee and non-employee restricted stock and option grants recognized in selling, general and administrative expenses, were as follows (in thousands):

	Years Ended December 31,		
	2016	2015	2014
Employees	$ 2,173	$ 1,694	$ 1,493
Non-employees	443	325	345
Total stock-based compensation expense	$ 2,616	$ 2,019	$ 1,838

At December 31, 2016, the total compensation cost related to unvested awards which had not been recognized was $6,112,000 and the associated weighted-average period over which the compensation cost attributable to those unvested awards would be recognized was approximately 1.75 years.

15. COMMITMENTS AND CONTINGENCIES.

Commitments – The following is a description of significant commitments at December 31, 2016:

Leases – Future minimum lease payments required by non-cancelable leases in effect at December 31, 2016 were as follows (in thousands):

Years Ended December 31,	Capital Leases	Operating Leases
2017	$ 930	$ 14,011
2018	588	11,822
2019	–	8,929
2020	–	4,942
2021	–	1,991
Thereafter	–	2,812
Total minimum payments	1,518	$ 44,507
Amount representing interest	(177)	
Obligations under capital leases	1,341	
Obligations due within one year	(794)	
Long-term obligations under capital leases	$ 547	

Total rent expense during the years ended December 31, 2016, 2015 and 2014 was $13,644,000, $9,528,000 and $2,417,000, respectively.

Sales Commitments – At December 31, 2016, the Company had entered into sales contracts with its major customers to sell certain quantities of ethanol and co-products. The Company had open ethanol indexed-price contracts for 336,895,000 gallons of ethanol as of December 31, 2016 and open fixed-price ethanol sales contracts totaling $21,780,000 as of December 31, 2016. The Company had open fixed-price co-product sales contracts totaling $23,200,000 and open indexed-price co-product sales contracts for 92,000 tons as of December 31, 2016. These sales contracts are scheduled to be completed throughout 2017.

Purchase Commitments – At December 31, 2016, the Company had indexed-price purchase contracts to purchase 39,257,000 gallons of ethanol and fixed-price purchase contracts to purchase $14,200,000 of ethanol from its suppliers. The Company had fixed-price purchase contracts to purchase $18,947,000 of corn from its suppliers. These purchase commitments are scheduled to be satisfied throughout 2017. In addition, in September 2016, the Company signed an agreement to finance and construct a 5 megawatt solar project at its Madera facility. The amount financed is up to $10.0 million, to be amortized over twenty years as part of the facility's property tax assessments. As of December 31, 2016, the Company had incurred $2.1 million in project costs, which is recorded in other liabilities in the accompanying consolidated balance sheets.

Other Commitments – At December 31, 2016, the Company had firm commitments for various capital and process improvement projects at the Company's plants of approximately $4,710,000, which are expected to be completed in 2017.

Contingencies – The following is a description of significant contingencies at December 31, 2016:

Litigation – The Company is subject to various claims and contingencies in the ordinary course of its business, including those related to litigation, business transactions, employee-related matters, and others. When the Company is aware of a claim or potential claim, it assesses the likelihood of any loss or exposure. If it is probable that a loss will result and the amount of the loss can be reasonably estimated, the Company will record a liability for the loss. If the loss is not probable or the amount of the loss cannot be reasonably estimated, the Company discloses the claim if the likelihood of a potential loss is reasonably possible and the amount involved could be material. While there can be no assurances, the Company does not expect that any of its pending legal proceedings will have a material financial impact on the Company's operating results.

The Company assumed certain legal matters which were ongoing at the date of its acquisition of Aventine Renewable Energy. Among them was a lawsuit between Aventine Renewable Energy, Inc. (now known as Pacific Ethanol Pekin, LLC, or "PE Pekin") and Glacial Lakes Energy and Aberdeen Energy, together, the "Defendants," in which PE Pekin sought damages for breach of termination agreements that wound down ethanol marketing arrangements between PE Pekin and the Defendants. In February 2017, the Company and the Defendants executed a settlement agreement, and the Defendants paid in cash to the Company $3.5 million in final resolution of these matters. The Company did not assign any value to the claim in the accounting for the Aventine acquisition. The Company recorded a gain, net of legal fees, of $3.2 million, upon receipt of the cash settlement. That payment having been received in February 2017, the Company expects to recognize the gain in the first quarter of 2017.

Pacific Ethanol, Inc., through a subsidiary acquired in its acquisition of Aventine, became involved in a pending lawsuit with Western Sugar Cooperative ("Western Sugar") that pre-dated the Aventine acquisition.

On February 27, 2015, Western Sugar filed a complaint in the United States District Court for the District of Colorado (Case No. 1:15-cv-00415) naming Aventine Renewable Energy, Inc. ("ARE, Inc."), one of Aventine's subsidiaries, as defendant. Western Sugar amended its complaint on April 21, 2015. ARE, Inc. purchased surplus sugar through a United States Department of Agriculture program. Western Sugar was one of the entities that warehoused this sugar for ARE, Inc. The suit alleged that ARE, Inc. breached its contract with Western Sugar by failing to pay certain penalty rates for the storage of its sugar or alternatively failing to pay a premium rate for storage. Western Sugar alleged that the penalty rates applied because ARE, Inc. failed to take timely delivery or otherwise cause timely shipment of the sugar. Western Sugar claimed "expectation damages" in the amount of approximately $8.6 million. On December 29, 2016, Western Sugar and ARE, Inc. entered into a settlement pursuant to which ARE Inc. paid $1.7 million and Western Sugar filed a Stipulation of Dismissal with prejudice. As a result, the Company reduced its litigation reserve of $2.8 million and recognized the recovery of $1.1 million in selling, general and administrative expenses for the year ended December 31, 2016.

The Company, through subsidiaries acquired in its acquisition of Aventine, became involved in various pending lawsuits with ACEC that pre-dated the Aventine acquisition.

On July 26, 2015, the Company settled all outstanding litigation with ACEC. The Company and ACEC agreed to dismiss all lawsuits with prejudice with no admission of fault or liability by the parties, and to release the alleged option held by ACEC to repurchase the land upon which the Company's 110 million gallon ethanol production facility in Aurora, Nebraska is located (the "Aurora West Facility"). In addition, the parties agreed to terminate the grain supply, marketing and various other agreements between them or their subsidiaries. Under the terms of the settlement, the Company and ACEC will each bear its own costs and fees associated with the lawsuits and the settlement. The Company and ACEC agreed to continue to work together to amend or replace certain real property easements currently in place to ensure continued mutual access by both parties to a system of rails, rail switches, roads, electrical improvements, and utilities already constructed near the Aurora West Facility.

On May 24, 2013, GS CleanTech Corporation ("GS CleanTech"), filed a suit in the United States District Court for the Eastern District of California, Sacramento Division (Case No.: 2:13-CV-01042-JAM-AC), naming Pacific Ethanol, Inc. as a defendant. On August 29, 2013, the case was transferred to the United States District Court for the Southern District of Indiana and made part of the pre-existing multi-district litigation involving GS CleanTech and multiple defendants. The suit alleged infringement of a patent assigned to GS CleanTech by virtue of certain corn oil separation technology in use at one or more of the ethanol production facilities in which the Company has an interest, including Pacific Ethanol Stockton LLC ("PE Stockton"), located in Stockton, California. The complaint sought preliminary and permanent injunctions against the Company, prohibiting future infringement on the patent owned by GS CleanTech and damages in an unspecified amount adequate to compensate GS CleanTech for the alleged patent infringement, but in any event no less than a reasonable royalty for the use made of the inventions of the patent, plus attorneys' fees. The Company answered the complaint, counterclaimed that the patent claims at issue, as well as the claims in several related patents, are invalid and unenforceable and that the Company is not infringing. Pacific Ethanol, Inc. does not itself use any corn oil separation technology and may seek a dismissal on those grounds.

On March 17 and March 18, 2014, GS CleanTech filed suit naming as defendants two Company subsidiaries: PE Stockton and Pacific Ethanol Magic Valley, LLC ("PE Magic Valley"). The claims were similar to those filed against Pacific Ethanol, Inc. in May 2013. These two cases were transferred to the multi-district litigation division in United States District Court for the Southern District of Indiana, where the case against Pacific Ethanol, Inc. was pending. Although PE Stockton and PE Magic Valley do separate and market corn oil, Pacific Ethanol, Inc., PE Stockton and PE Magic Valley strongly disagree that either of the subsidiaries use corn oil separation technology that infringes the patent owned by GS CleanTech. In a January 16, 2015 decision, the District Court for the Southern District of Indiana ruled in favor of a stipulated motion for partial summary judgment for Pacific Ethanol, Inc., PE Stockton and PE Magic Valley finding that all of the GS CleanTech patents in the suit were invalid and, therefore, not infringed. GS CleanTech has said it will appeal this decision when the remaining claim in the suit has been decided. The only remaining claim alleged that GS CleanTech inequitably conducted itself before the United States Patent Office when obtaining the patents at issue.

A trial in the District Court for the Southern District of Indiana was conducted in October 2015 on that single issue as well as whether GS CleanTech's behavior during prosecution of the patents rendered this an "exceptional case" which would allow the District Court to award the Defendants reimbursement of their attorneys' fees expended for defense of the case.

On September 15, 2016, the District Court issued an Order finding that GS CleanTech, the inventors and GS CleanTech's counsel committed inequitable conduct in the prosecution of the GS CleanTech patents before the United States Patent and Trademark Office. As a result, the District Court issued a Final Judgment on September 15, 2016 dismissing with prejudice all of GS CleanTech's cases against the Defendants, including Pacific Ethanol, Inc., PE Stockton and PE Magic Valley. The District Court's ruling of inequitable conduct results in the unenforceability of the GS CleanTech patents against third parties, and also enables the Defendants to pursue reimbursement of their costs and attorneys' fees from GS CleanTech and its counsel. GS Cleantech has asked the Court to reconsider its inequitable conduct decision, citing the existence of a recently issued patent which the patent examiner allowed despite the Court's findings and the allowance of which the Court did not consider when making its decision of inequitable conduct. GS Cleantech has indicated it will eventually appeal the current rulings on inequitable conduct and/or invalidity if the Court's reconsideration does not result in a change in its findings. The Court's reconsideration has been stayed until April 10, 2017.

The Company has evaluated the above cases as well as other pending cases. The Company currently has not recorded a litigation contingency liability with respect to these cases.

16. FAIR VALUE MEASUREMENTS.

The fair value hierarchy prioritizes the inputs used in valuation techniques into three levels, as follows:

- Level 1 – Observable inputs – unadjusted quoted prices in active markets for identical assets and liabilities;
- Level 2 – Observable inputs other than quoted prices included in Level 1 that are observable for the asset or liability through corroboration with market data; and
- Level 3 – Unobservable inputs – includes amounts derived from valuation models where one or more significant inputs are unobservable. For fair value measurements using significant unobservable inputs, a description of the inputs and the information used to develop the inputs is required along with a reconciliation of Level 3 values from the prior reporting period.

Pooled separate accounts – Pooled separate accounts invest primarily in domestic and international stocks, commercial paper or single mutual funds. The net asset value is used as a practical expedient to determine fair value for these accounts. Each pooled separate account provides for redemptions by the Retirement Plan at reported net asset values per share, with little to no advance notice requirement, therefore these funds are classified within Level 2 of the valuation hierarchy.

Warrants – The Company's warrants were valued using a Monte Carlo Binomial Lattice-Based valuation methodology, adjusted for marketability restrictions. The Company recorded its warrants issued from 2011 through 2012 at fair value and designated them as Level 3 on their issuance dates.

Significant assumptions used and related fair values for the warrants as of December 31, 2016 were as follows:

Original Issuance	Exercise Price	Volatility	Risk Free Interest Rate	Term (years)	Market Discount	Warrants Outstanding	Fair Value
07/03/2012	$6.09	40.9%	0.62%	0.50	11.3%	211,000	$ 651,000

Significant assumptions used and related fair values for the warrants as of December 31, 2015 were as follows:

Original Issuance	Exercise Price	Volatility	Risk Free Interest Rate	Term (years)	Market Discount	Warrants Outstanding	Fair Value
07/03/2012	$6.09	49.1%	0.86%	1.51	22.9%	211,000	$ 200,000
12/13/2011	$8.43	48.4%	0.65%	0.95	18.3%	138,000	73,000
							$ 273,000

The estimated fair value of the warrants is affected by the above underlying inputs. Observable inputs include the values of exercise price, stock price, term and risk-free interest rate. As separate inputs, an increase (decrease) in either the term or risk free interest rate will result in an increase (decrease) in the estimated fair value of the warrant.

Unobservable inputs include volatility and market discount. An increase (decrease) in volatility will result in an increase (decrease) in the estimated warrant value and an increase (decrease) in the market discount will result in a decrease (increase) in the estimated warrant fair value.

The volatility utilized was a blended average of the Company's historical volatility and implied volatilities derived from a selected peer group. The implied volatility component has remained relatively constant over time given that implied volatility is a forward-looking assumption based on observable trades in public option markets. Should the Company's historical volatility increase (decrease) on a go-forward basis, the resulting value of the warrants would increase (decrease).

The market discount, or a discount for lack of marketability, is quantified using a Black-Scholes option pricing model, with a primary model input of assumed holding period restriction. As the assumed holding period increases (decreases), the market discount increases (decreases), conversely impacting the fair value of the warrants.

Other Derivative Instruments – The Company's other derivative instruments consist of commodity positions. The fair values of the commodity positions are based on quoted prices on the commodity exchanges and are designated as Level 1 inputs.

The following table summarizes recurring fair value measurements by level at December 31, 2016 (in thousands):

	Fair Value	Level 1	Level 2	Level 3	Benefit Plan Percentage Allocation
Assets:					
Derivative financial instruments[1]	$ 978	$ 978	$ –	$ –	
Defined benefit plan assets[2] (pooled separate accounts):					
Large U.S. Equity[3]	3,134	–	3,134	–	25%
Small/Mid U.S. Equity[4]	1,802	–	1,802	–	15%
International Equity[5]	2,006	–	2,006	–	16%
Fixed Income[6]	5,481	–	5,481	–	44%
	$ 13,401	$ 978	$ 12,423	$ –	
Liabilities:					
Warrants[7]	$ (651)	$ –	$ –	$ (651)	
Derivative financial instruments[8]	(4,115)	(4,115)	–	–	
	$ (4,766)	$ (4,115)	$ –	$ (651)	

The following table summarizes recurring fair value measurements by level at December 31, 2015 (in thousands):

	Fair Value	Level 1	Level 2	Level 3	Benefit Plan Percentage Allocation
Assets:					
Derivative financial instruments[1]	$ 2,081	$ 2,081	$ –	$ –	
Defined benefit plan assets[2] (pooled separate accounts):					
Large U.S. Equity[3]	3,662	–	3,662	–	29%
Small/Mid U.S. Equity[4]	1,099	–	1,099	–	9%
International Equity[5]	1,525	–	1,525	–	12%
Fixed Income[6]	6,281	–	6,281	–	50%
	$ 14,648	$ 2,081	$ 12,567	$ –	
Liabilities:					
Warrants[7]	$ (273)	$ –	$ –	$ (273)	
Derivative financial instruments[8]	(1,848)	(1,848)	–	–	
	$ (2,121)	$ (1,848)	$ –	$ (273)	

(1) Included in derivative assets in the consolidated balance sheets.
(2) See Note 10 for accounting discussion.
(3) This category includes investments in funds comprised of equity securities of large U.S. companies. The funds are valued using the net asset value method in which an average of the market prices for the underlying investments is used to value the fund.
(4) This category includes investments in funds comprised of equity securities of small- and medium-sized U.S. companies. The funds are valued using the net asset value method in which an average of the market prices for the underlying investments is used to value the fund.
(5) This category includes investments in funds comprised of equity securities of foreign companies including emerging markets. The funds are valued using the net asset value method in which an average of the market prices for the underlying investments is used to value the fund.
(6) This category includes investments in funds comprised of U.S. and foreign investment-grade fixed income securities, high-yield fixed income securities that are rated below investment-grade, U.S. treasury securities, mortgage-backed securities, and other asset-backed securities. The funds are valued using the net asset value method in which an average of the market prices for the underlying investments is used to value the fund.
(7) Included in warrant liabilities at fair value in the consolidated balance sheets.
(8) Included in derivative liabilities in the consolidated balance sheets.

The changes in the Company's fair value of its Level 3 inputs with respect to its warrants were as follows (in thousands):

	Warrants
Balance, December 31, 2013	$ 8,215
Exercises of warrants	(41,486)
Expiration of warrants	(3)
Adjustments to fair value for the period	35,260
Balance, December 31, 2014	$ 1,986
Exercises of warrants	(72)
Expiration of warrants	(527)
Adjustments to fair value for the period	(1,114)
Balance, December 31, 2015	$ 273
Exercises of warrants	(179)
Adjustments to fair value for the period	557
Balance, December 31, 2016	$ 651

17. PARENT COMPANY FINANCIALS.

Restricted Net Assets – At December 31, 2016, the Company had approximately $287,200,000 of net assets at its subsidiaries that were not available to be transferred to Pacific Ethanol in the form of dividends, distributions, loans or advances due to restrictions contained in the credit facilities of these subsidiaries.

Parent company financial statements for the periods covered in this report are set forth below.

Pacific Ethanol, Inc.
Condensed Financial Information of the Registrant
Balance Sheets - Parent Company Only
(in thousands)

	December 31,	
	2016	2015
Cash and cash equivalents	$ 11,060	$ 20,618
Receivables from subsidiaries	7,203	14,505
Other current assets	6,442	11,361
Total current assets	24,705	46,484
Property and equipment, net	1,433	1,695
Investments in subsidiaries	363,401	301,416
Pacific Ethanol West plant receivable	58,766	41,763
Other assets	1,110	838
Total other assets	423,277	344,017
Total Assets	$ 449,415	$ 392,196
Accounts payable and accrued liabilities	$ 1,758	$ 1,963
Payables to subsidiaries	1,568	13,230
Accrued PE Op Co. purchase	3,829	3,828
Other current liabilities	183	–
Total current liabilities	7,338	19,021
Long Term debt, net	53,360	–
Warrant liabilities at fair value	651	273
Deferred tax liabilities	52	1,174
Other liabilities	124	184
Total Liabilities	61,525	20,652
Preferred stock	1	1
Common stock	40	39
Non-voting common stock	4	4
Additional paid-in capital	922,698	902,843
Accumulated other comprehensive income (expense)	(2,620)	1,040
Accumulated deficit	(532,233)	(532,383)
Total Pacific Ethanol, Inc. stockholders' equity	387,890	371,544
Total Liabilities and Stockholders' Equity	$ 449,415	$ 392,196

Pacific Ethanol, Inc.
Condensed Financial Information of the Registrant
Statements of Operations - Parent Company Only
(in thousands)

	Years Ended December 31,		
	2016	2015	2014
Management fees from subsidiaries	$ 12,968	$ 9,857	$ 12,731
Selling, general and administrative expenses	14,491	14,336	12,779
Asset impairment	–	1,970	–
Loss from operations	(1,523)	(6,449)	(48)
Fair value adjustments and warrant inducements	(557)	1,641	(37,532)
Interest income	5,964	5,739	4,753
Interest expense	(240)	(27)	(1,813)
Loss on extinguishments of debt	–	–	(2,363)
Other income	1,931	–	–
Income (loss) before provision for income taxes	5,575	904	(37,003)
Provision (benefit) for income taxes	(981)	(10,034)	15,137
Income (loss) before equity in earnings of subsidiaries	6,556	10,938	(52,140)
Equity in earnings (losses) of subsidiaries	(5,137)	(29,724)	73,429
Consolidated net income (loss)	$ 1,419	$ (18,786)	$ 21,289

Pacific Ethanol, Inc.
Condensed Financial Information of the Registrant
Statements of Cash Flows - Parent Company Only
(in thousands)

	2016	2015	2014
Operating Activities:			
Net income (loss)	$ 1,419	$ (18,786)	$ 21,289
Adjustments to reconcile net income (loss) to cash provided by (used in) operating activities:			
Equity in earnings (losses) of subsidiaries	5,137	29,724	(73,429)
Depreciation and amortization	727	390	126
Fair value adjustments	557	(1,641)	35,260
Loss on extinguishments of debt	–	–	2,363
Asset impairment	–	1,970	–
Deferred income taxes	(1,122)	(14,260)	5,128
Amortization of debt discount	10	–	1,674
Changes in operating assets and liabilities:			
Accounts receivables	7,302	(5,958)	(7,001)
Other assets	4,647	(4,139)	1,365
AP and accruals	(3,741)	604	(587)
Accounts payable with subsidiaries	(9,385)	11,179	5,846
Net cash provided by (used in) provided by operating activities	$ 5,551	$ (917)	$ (7,966)
Investing Activities:			
Additions to property and equipment	$ (465)	$ (1,483)	$ (455)
Purchases of investments in subsidiaries	–	–	(6,000)
Investments in subsidiaries	(50,886)	–	–
Purchase of PE OP Co. debt	(17,003)	–	(17,038)
Net cash used in investing activities	$ (68,354)	$ (1,483)	$ (23,493)
Financing Activities:			
Proceeds from issuance of senior notes	$ 53,350	$ –	$ –
Proceeds from exercise of warrants	1,164	368	43,676
Preferred stock dividends	(1,269)	(1,265)	(3,459)
Proceeds from equity raise	–	–	26,073
Payment on related party note	–	–	(750)
Payments on senior notes	–	–	(13,984)
Net cash provided by (used in) financing activities	$ 53,245	$ (897)	$ 51,556
Net increase (decrease) increase in cash and equivalents	(9,558)	(3,297)	20,097
Cash and equivalents at beginning of period	20,618	23,915	3,818
Cash and equivalents at ending of period	$ 11,060	$ 20,618	$ 23,915

18. QUARTERLY FINANCIAL DATA (UNAUDITED).

The Company's quarterly results of operations for the years ended December 31, 2016 and 2015 are as follows (in thousands). Certain of these calculations have been revised from the calculations previously reported to reflect the participating securities.

	First Quarter	Second Quarter	Third Quarter	Fourth Quarter
December 31, 2016:				
Net sales	$ 342,373	$ 422,860	$ 417,806	$ 441,719
Gross profit	$ 1,069	$ 17,704	$ 6,364	$ 26,695
Income (loss) from operations	$ (7,248)	$ 11,556	$ 393	$ 18,808
Net income (loss) attributed to Pacific Ethanol, Inc.	$ (13,226)	$ 5,086	$ (3,518)	$ 13,077
Preferred stock dividends	$ (315)	$ (315)	$ (319)	$ (320)
Income allocated to participating securities	$ –	$ (71)	$ –	$ (189)
Net income (loss) available to common stockholders	$ (13,541)	$ 4,700	$ (3,837)	$ 12,569
Income (loss) per common share:				
Basic	$ (0.32)	$ 0.11	$ (0.09)	$ 0.30
Diluted	$ (0.32)	$ 0.11	$ (0.09)	$ 0.30

	First Quarter	Second Quarter	Third Quarter	Fourth Quarter
December 31, 2015:				
Net sales	$ 206,176	$ 227,621	$ 380,622	$ 376,757
Gross profit (loss)	$ (987)	$ 6,254	$ (7,380)	$ 9,523
Income (loss) from operations	$ (5,892)	$ 2,261	$ (14,826)	$ 485
Net income (loss) attributed to Pacific Ethanol, Inc.	$ (4,380)	$ 1,010	$ (14,663)	$ (753)
Preferred stock dividends	$ (312)	$ (315)	$ (319)	$ (319)
Income allocated to participating securities	$ –	$ (18)	$ –	$ –
Net income (loss) available to common stockholders	$ (4,692)	$ 677	$ (14,982)	$ (1,072)
Income (loss) per common share:				
Basic	$ (0.19)	$ 0.03	$ (0.36)	$ (0.03)
Diluted	$ (0.19)	$ 0.03	$ (0.36)	$ (0.03)

Exhibit Number	Description*	Where Located				
		Form	File Number	Exhibit Number	Filing Date	Filed Herewith
2.1	Agreement and Plan of Merger dated as of December 30, 2014 by and among Pacific Ethanol, Inc., AVR Merger Sub, Inc. and Aventine Renewable Energy Holdings, Inc.	8-K	000-21467	2.1	12/31/2014	
2.2	Amendment No. 1 to Agreement and Plan of Merger dated as of March 31, 2015 by and among Pacific Ethanol, Inc., AVR Merger Sub, Inc. and Aventine Renewable Energy Holdings, Inc.	8-K	000-21467	2.1	04/02/2015	
3.1	Certificate of Incorporation	10-Q	000-21467	3.1	11/06/2015	
3.2	Certificate of Designations, Powers, Preferences and Rights of the Series A Cumulative Redeemable Convertible Preferred Stock	10-Q	000-21467	3.2	11/06/2015	
3.3	Certificate of Designations, Powers, Preferences and Rights of the Series B Cumulative Convertible Preferred Stock	10-Q	000-21467	3.3	11/06/2015	
3.4	Certificate of Amendment to Certificate of Incorporation dated June 3, 2010	10-Q	000-21467	3.4	11/06/2015	
3.5	Certificate of Amendment to Certificate of Incorporation effective June 8, 2011	10-Q	000-21467	3.5	11/06/2015	
3.6	Certificate of Amendment to Certificate of Incorporation effective May 14, 2013	10-Q	000-21467	3.6	11/06/2015	
3.7	Certificate of Amendment to Certificate of Incorporation effective July 1, 2015	10-Q	000-21467	3.7	11/06/2015	
3.8	Amended and Restated Bylaws	10-Q	000-21467	3.1	11/12/2014	
10.1	2006 Stock Incentive Plan, as amended#	S-8	333-196876	4.1	06/18/2014	
10.2	Form of Employee Restricted Stock Agreement under 2006 Stock Incentive Plan#	8-K	000-21467	10.2	10/10/2006	
10.3	Form of Non-Employee Director Restricted Stock Agreement under 2006 Stock Incentive Plan#	8-K	000-21467	10.3	10/10/2006	
10.4	2016 Stock Incentive Plan#	S-8	333-212070	4.1	06/16/2016	
10.5	Form of Employee Restricted Stock Agreement under 2016 Stock Incentive Plan#					X
10.6	Form of Non-Employee Director Restricted Stock Agreement under 2016 Stock Incentive Plan#					X

Exhibit Number	Description*	Where Located				
		Form	File Number	Exhibit Number	Filing Date	Filed Herewith
10.7	Amended and Restated Executive Employment Agreement dated November 7, 2016 between the Registrant and Neil M. Koehler#					X
10.8	Amended and Restated Executive Employment Agreement dated November 7, 2016 between the Registrant and Christopher W. Wright#					X
10.9	Amended and Restated Executive Employment Agreement dated November 7, 2016 between the Registrant and Bryon T. McGregor#					X
10.10	Amended and Restated Executive Employment Agreement dated November 7, 2016 between the Registrant and Michael D. Kandris#					X
10.11	Amended and Restated Executive Employment Agreement dated November 7, 2016 between the Registrant and Paul P. Kohler#					X
10.12	Amended and Restated Executive Employment Agreement dated November 7, 2016 between the Registrant and James R. Sneed#					X
10.13	Pacific Ethanol, Inc. 2016 Short-Term Incentive Plan Description#					X
10.14	Form of Indemnity Agreement between the Registrant and each of its Executive Officers and Directors#	10-K	000-21467	10.46	03/31/2010	
10.15	Warrant dated March 27, 2008 issued by the Registrant to Lyles United, LLC	8-K	000-21467	10.3	03/27/2008	
10.16	Registration Rights Agreement dated March 27, 2008 between the Registrant and Lyles United, LLC	8-K	000-21467	10.4	03/27/2008	
10.17	Letter Agreement dated March 27, 2008 between the Registrant and Lyles United, LLC	8-K	000-21467	10.5	03/27/2008	
10.18	Letter Agreement dated May 22, 2008 among the Registrant, Neil M. Koehler, Bill Jones, Paul P. Koehler and Thomas D. Koehler#	8-K	000-21467	10.3	05/23/2008	
10.19	Form of Warrant dated May 23, 2008 issued by the Registrant to each of Neil M. Koehler, Bill Jones, Paul P. Koehler and Thomas D. Koehler#	8-K	000-21467	10.2	05/23/2008	
10.20	Amended and Restated Loan and Security Agreement dated May 4, 2012 among Kinergy Marketing LLC, Pacific Ag. Products, LLC, the parties thereto from time to time as Lenders, Wells Fargo Bank, National Association and Wells Fargo Capital Finance, LLC	8-K	000-21467	10.1	05/08/2012	

Exhibit Number	Description*	Where Located				
		Form	File Number	Exhibit Number	Filing Date	Filed Herewith
10.21	Amendment No. 1 to Amended and Restated Loan and Security Agreement dated December 4, 2013 among Kinergy Marketing LLC, Pacific Ag. Products, LLC and Wells Fargo Capital Finance, LLC	8-K	000-21467	10.3	07/06/2015	
10.22	Amendment No. 2 to Amended and Restated Loan and Security Agreement dated December 29, 2014 among Kinergy Marketing LLC, Pacific Ag. Products, LLC and Wells Fargo Capital Finance, LLC	8-K	000-21467	10.2	07/06/2015	
10.23	Amendment No. 3 to Amended and Restated Loan and Security Agreement dated July 1, 2015 among Kinergy Marketing LLC, Pacific Ag. Products, LLC and Wells Fargo Capital Finance, LLC	8-K	000-21467	10.1	07/06/2015	
10.24	Amendment No. 4 to Amended and Restated Loan and Security Agreement dated December 11, 2015 among Kinergy Marketing LLC, Pacific Ag. Products, LLC and Wells Fargo Capital Finance, LLC	10-K	000-21467	10.21	03/15/2016	
10.25	Amendment No. 5 to Amended and Restated Loan and Security Agreement dated December 28, 2015 among Kinergy Marketing LLC, Pacific Ag. Products, LLC and Wells Fargo Capital Finance, LLC	10-K	000-21467	10.22	03/15/2016	
10.26	Amendment No. 6 to Amended and Restated Loan and Security Agreement dated May 23, 2016 among Kinergy Marketing LLC, Pacific Ag. Products, LLC and Wells Fargo Capital Finance, LLC					X
10.27	Amendment No. 7 to Amended and Restated Loan and Security Agreement dated July 21, 2016 among Kinergy Marketing LLC, Pacific Ag. Products, LLC and Wells Fargo Capital Finance, LLC					X
10.28	Amendment No. 8 to Amended and Restated Loan and Security Agreement dated December 15, 2016 among Kinergy Marketing LLC, Pacific Ag. Products, LLC and Wells Fargo Capital Finance, LLC					X
10.29	Amended and Restated Guarantee dated May 4, 2012 by the Registrant in favor of Wells Fargo Capital Finance, LLC for and on behalf of Lenders	8-K	000-21467	10.2	05/08/2012	
10.30	Form of Series I Warrants issued by the Registrant on July 3, 2012	8-K	000-21467	10.1	06/28/2012	

Exhibit Number	Description*	Where Located				
		Form	File Number	Exhibit Number	Filing Date	Filed Herewith
10.31	Contribution Agreement dated December 12, 2016 among Pacific Ethanol Central, LLC, Aurora Cooperative Elevator Company and Pacific Aurora, LLC	8-K	000-21467	10.1	12/12/2016	
10.32	Note Purchase Agreement dated December 12, 2016 among Pacific Ethanol, Inc. and the investors listed on the schedule of investors attached thereto	8-K	000-21467	10.2	12/12/2016	
10.33	Form of Senior Secured Note for an aggregate principal amount of $55 million issued on December 15, 2016 pursuant to the Note Purchase Agreement dated December 12, 2016 among Pacific Ethanol, Inc. and the investors party thereto	8-K	000-21467	10.3	12/20/2016	
10.34	Security Agreement dated December 15, 2016 among Pacific Ethanol, Inc., Cortland Capital Market Services LLC and the holders of Pacific Ethanol, Inc.'s Senior Secured Notes	8-K	000-21467	10.4	12/20/2016	
10.35	Credit Agreement dated December 15, 2016 among Pacific Ethanol Pekin, Inc., 1st Farm Credit Services, PCA and CoBank, ACB	8-K	000-21467	10.5	12/20/2016	
10.36	Security Agreement dated December 15, 2016 between Pacific Ethanol Pekin, Inc. and CoBank, ACB	8-K	000-21467	10.6	12/20/2016	
10.37	Credit Agreement dated December 15, 2016 among Pacific Aurora, LLC, Pacific Ethanol Aurora West, LLC, Pacific Ethanol Aurora East, LLC and CoBank, ACB	8-K	000-21467	10.7	12/20/2016	
10.38	Security Agreement dated December 15, 2016 among Pacific Aurora, LLC, Pacific Ethanol Aurora West, LLC, Pacific Ethanol Aurora East, LLC and CoBank, ACB	8-K	000-21467	10.8	12/20/2016	
10.39	Working Capital Maintenance Agreement dated December 15, 2016 between Pacific Ethanol, Inc. and CoBank, ACB	8-K	000-21467	10.9	12/20/2016	
14.1	Code of Ethics	8-K	000-21467	14.1	07/06/2015	
21.1	Subsidiaries of the Registrant					X
23.1	Consent of Independent Registered Public Accounting Firm					X
23.2	Consent of Independent Registered Public Accounting Firm					X

Exhibit Number	Description*	Where Located				
		Form	File Number	Exhibit Number	Filing Date	Filed Herewith
31.1	Certification Required by Rule 13a-14(a) of the Securities Exchange Act of 1934, as amended, as Adopted Pursuant to Section 302 of the Sarbanes-Oxley Act of 2002					X
31.2	Certification Required by Rule 13a-14(a) of the Securities Exchange Act of 1934, as amended, as Adopted Pursuant to Section 302 of the Sarbanes-Oxley Act of 2002					X
32.1	Certification of Chief Executive Officer and Chief Financial Officer Pursuant to 18 U.S.C. Section 1350, as Adopted Pursuant to Section 906 of the Sarbanes-Oxley Act of 2002					X
101.INS	XBRL Instance Document					X
101.SCH	XBRL Taxonomy Extension Schema					X
101.CAL	XBRL Taxonomy Extension Calculation Linkbase					X
101.DEF	XBRL Taxonomy Extension Definition Linkbase					X
101.LAB	XBRL Taxonomy Extension Label Linkbase					X
101.PRE	XBRL Taxonomy Extension Presentation Linkbase					X

(#) A contract, compensatory plan or arrangement to which a director or executive officer is a party or in which one or more directors or executive officers are eligible to participate.

(*) Certain of the agreements filed as exhibits contain representations and warranties made by the parties thereto. The assertions embodied in such representations and warranties are not necessarily assertions of fact, but a mechanism for the parties to allocate risk. Accordingly, investors should not rely on the representations and warranties as characterizations of the actual state of facts or for any other purpose at the time they were made or otherwise.

SIGNATURES

Pursuant to the requirements of Section 13 or 15(d) of the Securities Exchange Act of 1934, the registrant has duly caused this report to be signed on its behalf by the undersigned, thereunto duly authorized on this 15th day of March, 2017.

PACIFIC ETHANOL, INC.

/s/ NEIL M. KOEHLER
Neil M. Koehler
President and Chief Executive Officer

Pursuant to the requirements of the Securities Exchange Act of 1934, this report has been signed below by the following persons on behalf of the Registrant and in the capacities and on the dates indicated.

Signature	Title	Date
/s/ WILLIAM L. JONES William L. Jones	Chairman of the Board and Director	March 15, 2017
/s/ NEIL M. KOEHLER Neil M. Koehler	President, Chief Executive Officer (Principal Executive Officer) and Director	March 15, 2017
/s/ BRYON T. MCGREGOR Bryon T. McGregor	Chief Financial Officer (Principal Financial and Accounting Officer)	March 15, 2017
/s/ MICHAEL D. KANDRIS Michael D. Kandris	Chief Operating Officer and Director	March 15, 2017
/s/ TERRY L. STONE Terry L. Stone	Director	March 15, 2017
/s/ JOHN L. PRINCE John L. Prince	Director	March 15, 2017
/s/ DOUGLAS L. KIETA Douglas L. Kieta	Director	March 15, 2017
/s/ LARRY D. LAYNE Larry D. Layne	Director	March 15, 2017

EXHIBITS FILED WITH THIS REPORT

Exhibit Number	Description*
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10.6	Form of Non-Employee Director Restricted Stock Agreement under 2016 Stock Incentive Plan
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101.INS	XBRL Instance Document
101.SCH	XBRL Taxonomy Extension Schema
101.CAL	XBRL Taxonomy Extension Calculation Linkbase
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101.LAB	XBRL Taxonomy Extension Label Linkbase
101.PRE	XBRL Taxonomy Extension Presentation Linkbase

(*) Certain of the agreements filed as exhibits contain representations and warranties made by the parties thereto. The assertions embodied in such representations and warranties are not necessarily assertions of fact, but a mechanism for the parties to allocate risk. Accordingly, investors should not rely on the representations and warranties as characterizations of the actual state of facts or for any other purpose at the time they were made or otherwise.

Exhibit 10.5

PACIFIC ETHANOL, INC.
RESTRICTED STOCK AGREEMENT

THIS RESTRICTED STOCK AGREEMENT (this "Agreement") dated and effective as of _____ (the "Grant Date") by and between Pacific Ethanol, Inc., a Delaware corporation (the "Company"), and «First_Name» «Last_Name» ("Employee") is entered into as follows:

WHEREAS, the Company has established the Pacific Ethanol, Inc. 2016 Stock Incentive Plan (the "Plan"), a copy of which has previously been provided to Employee or is provided with this Agreement; and

WHEREAS, the Compensation Committee of the Board of Directors of the Company (the "Committee") has determined that Employee be granted shares of the Company's $.001 par value per share Common Stock (the "Restricted Stock") subject to the restrictions stated below.

Capitalized terms used but not otherwise defined herein shall have the respective meanings ascribed to them in the Plan. References herein to the Company shall also include, where and as applicable, any Parent or Subsidiary of the Company in the same manner used in the Plan.

NOW, THEREFORE, the parties hereby agree as follows:

1. **Grant of Restricted Stock**. Subject to the terms and conditions of this Agreement and of the Plan, the Company hereby grants to Employee «First_Name» «Last_Name», «Total_of_Shares_in_Words» («Total_of_Shares») shares of Restricted Stock. As soon as practicable, the Company shall cause the shares of Restricted Stock to be issued in Employee's name. During the Restriction Period (as defined below), the Restricted Stock shall be held in the custody of the Company or its designee for Employee's account. The Restricted Stock shall be subject to, and shall bear appropriate legends with respect to, the restrictions described herein.

2. **Vesting Schedule**.

(a) The interest of Employee in the Restricted Stock shall vest as follows: 33% of the shares of Restricted Stock shall vest on April 1, 2017, 33% of the shares of Restricted Stock shall vest on April 1, 2018 and 34% of the shares of Restricted Stock shall vest on April 1, 2019; provided, that Employee remains continuously employed by the Company on a full-time basis from the Grant Date through the applicable vesting date. If a vesting date falls on a weekend or any other day on which the NASDAQ Stock Market ("NASDAQ") is not open, vesting of the corresponding Restricted Stock shall occur on the next following NASDAQ trading day. Notwithstanding the foregoing, the interest of Employee in the Restricted Stock may vest as to one hundred percent (100%) of the then unvested shares of Restricted Stock upon a Change in Control but only in accordance with the Plan.

(b) Upon termination of the Restriction Period, the Company shall, as soon as practicable thereafter, deliver to Employee a certificate representing the shares of Restricted Stock with respect to which such restrictions have lapsed. Employee may instruct the Company in writing to deliver vested shares of Restricted Stock to Employee's broker or other designee; provided that Employee communicates such instruction in writing to the Chief Financial Officer or other designated officer of the Company as to the applicable vesting amount not more than thirty (30) business days and not less than five (5) business days prior to the applicable vesting date. If Employee does not timely provide such instructions, the Company may deliver the vested shares of Restricted Stock to Employee personally or to Employee's home or other address as set forth in the Company's books and records.

3. **Restrictions**.

(a) No portion of the Restricted Stock or rights granted hereunder may be sold, transferred, assigned, pledged or otherwise encumbered or disposed of by Employee until such portion of the Restricted Stock becomes vested in accordance with Section 2 of this Agreement. The period of time between the date hereof and the date shares of Restricted Stock vest is referred to herein as the "Restriction Period" as to those shares of Restricted Stock. In addition, none of the Restricted Stock, even if vested, may be sold or transferred in contravention of (i) any market blackout periods the Company may impose from time to time, or (ii) the Company's insider trading policies to the extent applicable to Employee from time to time.

(b) The vesting schedule requires Employee's continued service as a full-time employee of the Company during the applicable vesting periods as a condition to the vesting of the Restricted Stock and the rights and benefits under this Agreement. If Employee's employment with the Company is terminated for any reason, whether voluntarily or involuntarily, the balance of the Restricted Stock subject to the provisions of this Agreement which has not vested at the time of Employee's termination of employment shall be forfeited by Employee without payment of any consideration by the Company and neither Employee nor any successor, heir, assign or personal representative of Employee shall have any right, title or interest in or to the forfeited shares of Restricted Stock or the certificates evidencing them, and the Company shall direct its transfer agent of the Common Stock to make the appropriate entries in its records showing the cancellation of the certificate or certificates for such Restricted Stock. Service as an employee for only a portion of a vesting period, even if a substantial portion, will not entitle Employee to any proportionate vesting of the Restricted Stock allocated to that period or avoid or mitigate the forfeiture of Employee's Restricted Stock that will occur upon the cessation of Employee's service as an employee of the Company. Notwithstanding the foregoing, the Company may, by written agreement with the Employee, expressly agree to provisions different from those set forth above with respect to severance benefits as to the Restricted Stock.

4. **Shareholder Rights**. During the Restriction Period, Employee shall have all the rights of a shareholder with respect to the Restricted Stock except for the right to transfer the Restricted Stock, as set forth in Section 3 of this Agreement. Accordingly, Employee shall have the right to vote the Restricted Stock and to receive any cash dividends paid to or made with respect to the Restricted Stock; provided, however, that dividends paid, if any, with respect to that Restricted Stock which has not vested at the time of the dividend payment shall be held in the custody of the Company and shall be subject to the same restrictions that apply to the corresponding Restricted Stock.

5. **Changes in Common Stock**. If any change is made to the Common Stock by reason of any stock split, stock dividend, recapitalization, combination of shares, exchange of shares or other change affecting the outstanding Common Stock as a class without the Company's receipt of consideration, appropriate adjustments shall be made by the Plan Administrator to (i) the maximum number and/or class of securities issuable under the Plan, (ii) the maximum number and/or class of securities for which any one person may be granted Awards under the Plan per calendar year, (iii) the number and/or class of securities and the exercise or base price per share (or any other cash consideration payable per share) in effect under each outstanding Award under the Discretionary Grant Program, and (iv) the number and/or class of securities subject to each outstanding Award under the Stock Issuance Program and the cash consideration (if any) payable per share thereunder. To the extent such adjustments are to be made to outstanding Awards, those adjustments shall be effected in a manner that shall preclude the enlargement or dilution of rights and benefits under those Awards. The adjustments determined by the Plan Administrator shall be final, binding and conclusive.

6. **Taxes**.

(a) Employee will recognize ordinary income for federal income tax purposes on each date the Restricted Stock subject to Employee's award vests, whether pursuant to the normal vesting schedule above, the acceleration provisions of this Agreement that may apply or otherwise. The amount of Employee's taxable income on each such vesting date will equal the fair market value per share of Common Stock on the date of vesting times the number of shares of Restricted Stock which vest on that date.

(b) Employee shall be liable for any and all taxes, including any withholding taxes, arising out of this grant or the vesting of Restricted Stock hereunder. Employee may elect to satisfy such withholding tax obligation by (i) having the Company retain Restricted Stock having a fair market value equal to the Company's minimum withholding obligation, or (ii) making a cash payment to the Company in an amount equal to the Company's minimum withholding obligation; provided, that Employee make and communicate such election in writing in the attached Notice of Election to the Chief Financial Officer or other designated officer of the Company as to the applicable vesting amount not more than thirty (30) business days and not less than five (5) business days prior to the applicable vesting date. If Employee elects to pay the applicable minimum withholding amount in cash, then Employee shall make such payment within two (2) business days following the applicable vesting date. If Employee (A) fails to make and communicate such election in writing in the attached Notice of Election to the Chief Financial Officer or other designated officer of the Company within the applicable time period, or (B) elects to make a cash payment of the minimum withholding amount and Employee fails to make such payment within two (2) business days following the applicable vesting date, then the Company's minimum withholding tax obligations shall be satisfied by the Company withholding a number of shares of Restricted Stock that would otherwise vest and be delivered to Employee under this Agreement that the Company determines has a fair market value sufficient to meet such obligations. The Company shall not be required to deliver any Restricted Stock or to recognize any purported transfer of shares of the Restricted Stock until such withholding obligations are satisfied. Employee is ultimately liable and responsible for all taxes owed by Employee in connection with Employee's Restricted Stock, regardless of any action the Company takes with respect to any tax withholding obligations that arise in connection with the Restricted Stock. The Company makes no representation or undertaking regarding the treatment of any tax withholding in connection with the grant, issuance, vesting or settlement of the Restricted Stock or the subsequent sale of any of the shares of Restricted Stock. The Company does not commit and is under no obligation to structure the Restricted Stock award or program to reduce or eliminate Employee's tax liability. The Company shall not be required to issue or deliver to Employee fractional shares of Restricted Stock upon withholding of any shares of Restricted Stock to cover the minimum withholding tax, or otherwise, and any fractional share amounts shall be paid to Employee by the Company solely in cash based on the pro rata fair market value of such fractional share amounts on the date of vesting.

7. **Securities Law Compliance**. The Company will use its reasonable commercial efforts to assure that all Restricted Stock issued pursuant to this Agreement is registered under the federal securities laws. However, no Restricted Stock will be issued pursuant to Employee's award if such issuance would otherwise constitute a violation of any applicable federal or state securities laws or regulations or the requirements of The NASDAQ Capital Market and any stock exchange or other market on which the Common Stock is then quoted or listed for trading. The inability of the Company to obtain approval from any regulatory body having authority deemed by the Company to be necessary to the lawful issuance of any Restricted Stock hereunder shall defer the Company's obligation with respect to the issuance of such Restricted Stock until such approval has been obtained.

8. **Miscellaneous**.

(a) The grant of Restricted Stock or another award to Employee in any one year, or at any time, does not obligate the Company to make a grant in any future year or in any given amount and should not create an expectation that the Company might make a grant in any future year or in any given amount.

(b) The Company shall not be required (i) to transfer on its books any shares of Restricted Stock which shall have been sold or transferred in violation of any of the provisions set forth in this Agreement, or (ii) to treat as owner of such shares or to accord the right to vote as such owner or to pay dividends to any transferee to whom such shares shall have been so transferred.

(c) The parties agree to execute such further instruments and to take such action as may reasonably be necessary to carry out the intent of this Agreement.

(d) Any notice required or permitted hereunder shall be given in writing and shall be deemed effectively given upon delivery to Employee at Employee's address then on file with the Company.

(e) This Agreement shall not be construed so as to grant Employee any right to remain in the employ of the Company.

(f) The parties agree that neither the Company nor any of its affiliates shall have any further obligation to Employee relating to the grant of stock or other incentive compensation except as stated herein.

(g) This Agreement and the Plan constitute the entire agreement of the parties with respect to the subject matter hereof. This Agreement may not be amended except with the consent of the Committee and by a written instrument duly executed by the Company and Employee.

(h) This Agreement shall be binding upon and shall inure to the benefit of the parties hereto and to their heirs, personal representatives, successors and assigns. The terms of this Agreement shall in all respects be subject to the terms of the Plan. Employee hereby agrees to accept as binding, conclusive and final all decisions and interpretations of the Committee upon any questions arising under the Plan or this Agreement.

(i) The interpretation, performance and enforcement of this Agreement shall be governed by the laws of the State of Delaware without resort to that State's conflicts-of-laws rules.

(j) This Agreement shall not in any way affect the right of the Company to adjust, reclassify, reorganize or otherwise make changes in its capital or business structure or to merge, consolidate, dissolve, liquidate or sell or transfer all or any part of its business or assets.

9. **Mandatory Arbitration**. ANY AND ALL DISPUTES OR CONTROVERSIES BETWEEN EMPLOYEE AND THE COMPANY OR BETWEEN THE COMPANY AND EMPLOYEE ARISING OUT OF, RELATING TO OR OTHERWISE CONNECTED WITH THIS AGREEMENT OR THE AWARD OF RESTRICTED STOCK EVIDENCED HEREBY OR THE VALIDITY, CONSTRUCTION, PERFORMANCE OR TERMINATION OF THIS AGREEMENT SHALL BE SETTLED EXCLUSIVELY BY BINDING ARBITRATION TO BE HELD IN SACRAMENTO COUNTY, CALIFORNIA. THE ARBITRATION PROCEEDINGS SHALL BE GOVERNED BY (I) THE NATIONAL RULES FOR THE RESOLUTION OF EMPLOYMENT DISPUTES THEN IN EFFECT OF THE AMERICAN ARBITRATION ASSOCIATION, AND (II) THE FEDERAL ARBITRATION ACT. THE ARBITRATOR SHALL HAVE THE SAME, BUT NO GREATER, REMEDIAL AUTHORITY AS WOULD A COURT HEARING THE SAME DISPUTE. THE DECISION OF THE ARBITRATOR SHALL BE FINAL, CONCLUSIVE AND BINDING ON THE PARTIES TO THE ARBITRATION AND SHALL BE IN LIEU OF THE RIGHTS THOSE PARTIES MAY OTHERWISE HAVE TO A JURY TRIAL; PROVIDED, HOWEVER, THAT SUCH DECISION SHALL BE SUBJECT TO CORRECTION, CONFIRMATION OR VACATION IN ACCORDANCE WITH THE PROVISIONS AND STANDARDS OF APPLICABLE LAW GOVERNING THE JUDICIAL REVIEW OF ARBITRATION AWARDS. THE ARBITRATOR SHALL ISSUE A WRITTEN DECISION THAT REVEALS THE ESSENTIAL FINDINGS AND CONCLUSIONS ON WHICH THE DECISION IS BASED, AND THE ARBITRATOR'S DECISION SHALL BE SUBJECT TO SUCH JUDICIAL REVIEW AS IS PROVIDED BY LAW. THE COMPANY SHALL PAY ANY ARBITRATION FILING FEE, AND WILL BEAR ALL OTHER COSTS OF ARBITRATION, INCLUDING FEES FOR THE SERVICES OF THE ARBITRATOR AND ANY COURT REPORTER ORDERED BY THE ARBITRATOR. EACH PARTY SHALL BEAR ITS, HIS OR HER OWN COSTS OF LEGAL REPRESENTATION; PROVIDED, HOWEVER, IF ANY PARTY PREVAILS ON A CLAIM ENTITLING THE PREVAILING PARTY TO ATTORNEYS' FEES AND/OR COSTS PURSUANT TO ANY APPLICABLE EMPLOYMENT OR CIVIL RIGHTS STATUTE, THE ARBITRATOR MAY AWARD REASONABLE FEES AND/OR COSTS TO THE PREVAILING PARTY IN ACCORDANCE WITH SUCH CLAIM. JUDGMENT SHALL BE ENTERED ON THE ARBITRATOR'S DECISION IN ANY COURT HAVING JURISDICTION OVER THE SUBJECT MATTER OF SUCH DISPUTE OR CONTROVERSY. NOTWITHSTANDING THE FOREGOING, EITHER PARTY MAY IN AN APPROPRIATE MATTER APPLY TO A COURT PURSUANT TO CALIFORNIA CODE OF CIVIL PROCEDURE SECTION 1281.8, OR ANY COMPARABLE STATUTORY PROVISION OR COMMON LAW PRINCIPLE, FOR PROVISIONAL RELIEF, INCLUDING A TEMPORARY RESTRAINING ORDER OR A PRELIMINARY INJUNCTION. TO THE EXTENT PERMITTED BY LAW, THE PROCEEDINGS AND RESULTS, INCLUDING THE ARBITRATOR'S DECISION, SHALL BE KEPT CONFIDENTIAL TO THE EXTENT PERMITTED BY APPLICABLE LAW.

10. **Remaining Terms**. The remaining terms and conditions of Employee's award are governed by the Plan, and Employee's award is also subject to all interpretations, amendments, rules, regulations and decisions that may from time to time exist, be adopted or made under and pursuant to the Plan. The General Plan Description, which is the official prospectus summarizing the principal features of the Plan, has previously been provided to Employee or is provided with this Agreement.

(Signature Page Follows)

IN WITNESS WHEREOF, the undersigned have executed this Agreement effective on the date first set above.

COMPANY:

PACIFIC ETHANOL, INC.,
a Delaware corporation

By: _____
Edward Baker
Vice President, Human Resources

I, the undersigned Employee, hereby acknowledge receiving, reading and understanding the General Plan Description, which is the official prospectus summarizing the principal features of the Plan, this Agreement and the Plan itself. I further acknowledge and accept the foregoing terms and conditions of the Restricted Stock award evidenced hereby. I also acknowledge and agree that the foregoing sets forth the entire understanding between the Company and me regarding my entitlement to receive the shares of the Company's Common Stock subject to such award and supersedes all prior oral and written agreements on that subject.

EMPLOYEE:

_____
«First_Name» «Last_Name»

NOTICE OF ELECTION

Chief Financial Officer
Pacific Ethanol, Inc.

Re: Notice of Election as to Manner of Payment of Minimum Withholding Tax

1. The undersigned Employee has been granted shares of Restricted Stock of Pacific Ethanol, Inc., a Delaware corporation (the "Company").

2. The undersigned Employee hereby elects to (check one):

   _____ pay the minimum withholding tax in cash with respect to shares of Restricted Stock; or

   _____ have shares of Restricted Stock withheld by the Company to cover the minimum withholding tax.

3. The foregoing election is with respect to the following Grant Date or vesting date(check one):

   _____ April 1, 2017
   _____ April 1, 2018
   _____ April 1, 2019

4. If the undersigned Employee has elected to pay to the Company the minimum withholding tax in cash with respect to shares of Restricted Stock, the undersigned Employee shall make such payment to the Company within two (2) business days following the applicable vesting date. If the undersigned Employee fails to make payment within such period, then the Company's minimum withholding tax obligations may be satisfied by the Company withholding a number of shares of Restricted Stock that would otherwise vest and be delivered to Employee that the Company determines has a fair market value sufficient to meet such obligations.

5. The terms and conditions of Company's grant of Restricted Stock are governed solely by the Restricted Stock Agreement and the Plan.

Dated: _____

EMPLOYEE

_____
«First_Name» «Last_Name»

Exhibit 10.6

PACIFIC ETHANOL, INC.
RESTRICTED STOCK AGREEMENT

THIS RESTRICTED STOCK AGREEMENT (this "Agreement") dated and effective as of _____ (the "Grant Date") by and between Pacific Ethanol, Inc., a Delaware corporation (the "Company"), and<< First_Name>> <<Last_Name>> ("Board Member"), is entered into as follows:

WHEREAS, the Company has established the Pacific Ethanol, Inc. 2016 Stock Incentive Plan (the "Plan"), a copy of which has previously been provided to Board Member or is provided with this Agreement; and

WHEREAS, the Compensation Committee of the Board of Directors of the Company (the "Committee") has determined that Board Member be granted shares of the Company's $.001 par value per share Common Stock (the "Restricted Stock") subject to the restrictions stated below.

Capitalized terms used but not otherwise defined herein shall have the respective meanings ascribed to them in the Plan. References herein to the Company shall also include, where and as applicable, any Parent or Subsidiary of the Company in the same manner used in the Plan.

NOW, THEREFORE, the parties hereby agree as follows:

1. **Grant of Restricted Stock**. Subject to the terms and conditions of this Agreement and of the Plan, the Company hereby grants to Board Member, («Total_of_Shares_in_Words») («Total_of_Shares») shares of Restricted Stock. As soon as practicable, the Company shall cause the shares of Restricted Stock to be issued in Board Member's name. During the Restriction Period (as defined below), the Restricted Stock shall be held in the custody of the Company or its designee for Board Member's account. The Restricted Stock shall be subject to, and shall bear appropriate legends with respect to, the restrictions described herein.

2. **Vesting Schedule**.

(a) The interest of Board Member in the Restricted Stock shall vest as to all (num shares) shares of such Restricted Stock on the earlier to occur of (i) July 1, [____], or (ii) the date of the Company's next Annual Meeting of Shareholders; provided that the Board Member remains a member of the Board of Directors of the Company from the Grant Date to the applicable vesting date. If a vesting date falls on a weekend or any other day on which the NASDAQ Stock Market ("NASDAQ") is not open, vesting of the corresponding Restricted Stock shall occur on the next following NASDAQ trading day. Notwithstanding the foregoing, the interest of Board Member in the Restricted Stock may vest as to one hundred percent (100%) of the then unvested shares of Restricted Stock upon a Change in Control but only in accordance with the Plan.

(b) Upon termination of the Restriction Period, the Company shall, as soon as practicable thereafter, deliver to Board Member a certificate representing the shares of Restricted Stock with respect to which such restrictions have lapsed. Board Member may instruct the Company in writing to deliver vested shares of Restricted Stock to Board Member's broker or other designee; provided, that Board Member shall communicate such instruction in writing to the Chief Financial Officer or other designated officer of the Company as to the applicable vesting amount not more than thirty (30) business days and not less than five (5) business days prior to the applicable vesting date. If Board Member does not timely provide such instructions, the Company may deliver the vested shares of Restricted Stock to Board Member personally or to Board Member's home or other address as set forth in the Company's books and records.

3. **Restrictions**.

(a) No portion of the Restricted Stock or rights granted hereunder may be sold, transferred, assigned, pledged or otherwise encumbered or disposed of by Board Member until such portion of the Restricted Stock becomes vested in accordance with Section 2 of this Agreement. The period of time between the date hereof and the date shares of Restricted Stock vest is referred to herein as the "Restriction Period" as to those shares of Restricted Stock. In addition, none of the Restricted Stock, even if vested, may be sold or transferred in contravention of (i) any market blackout periods the Company may impose from time to time, or (ii) the Company's insider trading policies to the extent applicable to Board Member from time to time.

(b) The vesting schedule requires Board Member's continued service as a member of the Board of Directors of the Company during the applicable vesting periods as a condition to the vesting of the Restricted Stock and the rights and benefits under this Agreement. If Board Member's service as a member of the Board of Directors of the Company is terminated for any reason, whether voluntarily or involuntarily, the balance of the Restricted Stock subject to the provisions of this Agreement which has not vested at the time of Board Member's termination of service shall be forfeited by Board Member without payment of any consideration by the Company and neither Board Member nor any successor, heir, assign or personal representative of Board Member shall have any right, title or interest in or to the forfeited shares of Restricted Stock or the certificates evidencing them, and the Company shall direct its transfer agent of the Common Stock to make the appropriate entries in its records showing the cancellation of the certificate or certificates for such Restricted Stock. Service as a member of the Board of Directors of the Company for only a portion of a vesting period, even if a substantial portion, will not entitle Board Member to any proportionate vesting of the Restricted Stock allocated to that period or avoid or mitigate the forfeiture of Board Member's Restricted Stock that will occur upon the cessation of Board Member's service as a member of the Board of Directors of the Company.

4. **Shareholder Rights**. During the Restriction Period, Board Member shall have all the rights of a shareholder with respect to the Restricted Stock except for the right to transfer the Restricted Stock, as set forth in Section 3 of this Agreement. Accordingly, Board Member shall have the right to vote the Restricted Stock and to receive any cash dividends paid to or made with respect to the Restricted Stock; provided, however, that dividends paid, if any, with respect to that Restricted Stock which has not vested at the time of the dividend payment shall be held in the custody of the Company and shall be subject to the same restrictions that apply to the corresponding Restricted Stock.

5. **Changes in Common Stock**. If any change is made to the Common Stock by reason of any stock split, stock dividend, recapitalization, combination of shares, exchange of shares or other change affecting the outstanding Common Stock as a class without the Company's receipt of consideration, appropriate adjustments shall be made by the Plan Administrator to (i) the maximum number and/or class of securities issuable under the Plan, (ii) the maximum number and/or class of securities for which any one person may be granted Awards under the Plan per calendar year, (iii) the number and/or class of securities and the exercise or base price per share (or any other cash consideration payable per share) in effect under each outstanding Award under the Discretionary Grant Program, and (iv) the number and/or class of securities subject to each outstanding Award under the Stock Issuance Program and the cash consideration (if any) payable per share thereunder. To the extent such adjustments are to be made to outstanding Awards, those adjustments shall be effected in a manner that shall preclude the enlargement or dilution of rights and benefits under those Awards. The adjustments determined by the Plan Administrator shall be final, binding and conclusive.

6. **Taxes**.

(a) Board Member will recognize ordinary income for federal income tax purposes on each date the Restricted Stock subject to Board Member's award vests, whether pursuant to the normal vesting schedule above, the acceleration provisions of this Agreement that may apply or otherwise. The amount of Board Member's taxable income on each such vesting date will equal the fair market value per share of Common Stock on the date of vesting times the number of shares of Restricted Stock which vest on that date.

(b) Board Member shall be liable for any and all taxes arising out of this grant or the vesting of Restricted Stock hereunder. The Company makes no representation or undertaking regarding the tax treatment to Board Member in connection with the grant, issuance, vesting or settlement of the Restricted Stock or the subsequent sale of any of the shares of Restricted Stock. The Company does not commit and is under no obligation to structure the Restricted Stock award or program to reduce or eliminate Board Member's tax liability.

7. **Securities Law Compliance**. The Company will use its reasonable commercial efforts to assure that all Restricted Stock issued pursuant to this Agreement is registered under the federal securities laws. However, no Restricted Stock will be issued pursuant to Board Member's award if such issuance would otherwise constitute a violation of any applicable federal or state securities laws or regulations or the requirements of The NASDAQ Capital Market and any stock exchange or other market on which the Common Stock is then quoted or listed for trading. The inability of the Company to obtain approval from any regulatory body having authority deemed by the Company to be necessary to the lawful issuance of any Restricted Stock hereunder shall defer the Company's obligation with respect to the issuance of such Restricted Stock until such approval has been obtained.

8. **Miscellaneous**.

(a) The grant of Restricted Stock or another award to Board Member in any one year, or at any time, does not obligate the Company to make a grant in any future year or in any given amount and should not create an expectation that the Company might make a grant in any future year or in any given amount.

(b) The Company shall not be required (i) to transfer on its books any shares of Restricted Stock which shall have been sold or transferred in violation of any of the provisions set forth in this Agreement, or (ii) to treat as owner of such shares or to accord the right to vote as such owner or to pay dividends to any transferee to whom such shares shall have been so transferred.

(c) The parties agree to execute such further instruments and to take such action as may reasonably be necessary to carry out the intent of this Agreement.

(d) Any notice required or permitted hereunder shall be given in writing and shall be deemed effectively given upon delivery to Board Member at Board Member's address then on file with the Company.

(e) This Agreement shall not be construed so as to grant Board Member any right to remain in the service (or, if also an employee, the employ) of the Company.

(f) The parties agree that neither the Company nor any of its affiliates shall have any further obligation to Board Member relating to the grant of stock or other incentive compensation except as stated herein.

(g) This Agreement and the Plan constitute the entire agreement of the parties with respect to the subject matter hereof. This Agreement may not be amended except with the consent of the Committee and by a written instrument duly executed by the Company and Board Member.

(h) This Agreement shall be binding upon and shall inure to the benefit of the parties hereto and to their heirs, personal representatives, successors and assigns. The terms of this Agreement shall in all respects be subject to the terms of the Plan. Board Member hereby agrees to accept as binding, conclusive and final all decisions and interpretations of the Committee upon any questions arising under the Plan or this Agreement.

(i) The interpretation, performance and enforcement of this Agreement shall be governed by the laws of the State of Delaware without resort to that State's conflicts-of-laws rules.

(j) This Agreement shall not in any way affect the right of the Company to adjust, reclassify, reorganize or otherwise make changes in its capital or business structure or to merge, consolidate, dissolve, liquidate or sell or transfer all or any part of its business or assets.

9. **Mandatory Arbitration**. ANY AND ALL DISPUTES OR CONTROVERSIES BETWEEN BOARD MEMBER AND THE COMPANY OR BETWEEN THE COMPANY AND BOARD MEMBER ARISING OUT OF, RELATING TO OR OTHERWISE CONNECTED WITH THIS AGREEMENT OR THE AWARD OF RESTRICTED STOCK EVIDENCED HEREBY OR THE VALIDITY, CONSTRUCTION, PERFORMANCE OR TERMINATION OF THIS AGREEMENT SHALL BE SETTLED EXCLUSIVELY BY BINDING ARBITRATION TO BE HELD IN SACRAMENTO COUNTY, CALIFORNIA. THE ARBITRATION PROCEEDINGS SHALL BE GOVERNED BY (I) THE NATIONAL RULES FOR THE RESOLUTION OF COMMERCIAL DISPUTES THEN IN EFFECT OF THE AMERICAN ARBITRATION ASSOCIATION, AND (II) THE FEDERAL ARBITRATION ACT. THE ARBITRATOR SHALL HAVE THE SAME, BUT NO GREATER, REMEDIAL AUTHORITY AS WOULD A COURT HEARING THE SAME DISPUTE. THE DECISION OF THE ARBITRATOR SHALL BE FINAL, CONCLUSIVE AND BINDING ON THE PARTIES TO THE ARBITRATION AND SHALL BE IN LIEU OF THE RIGHTS THOSE PARTIES MAY OTHERWISE HAVE TO A JURY TRIAL; PROVIDED, HOWEVER, THAT SUCH DECISION SHALL BE SUBJECT TO CORRECTION, CONFIRMATION OR VACATION IN ACCORDANCE WITH THE PROVISIONS AND STANDARDS OF APPLICABLE LAW GOVERNING THE JUDICIAL REVIEW OF ARBITRATION AWARDS. THE ARBITRATOR SHALL ISSUE A WRITTEN DECISION THAT REVEALS THE ESSENTIAL FINDINGS AND CONCLUSIONS ON WHICH THE DECISION IS BASED, AND THE ARBITRATOR'S DECISION SHALL BE SUBJECT TO SUCH JUDICIAL REVIEW AS IS PROVIDED BY LAW. THE COMPANY SHALL PAY ANY ARBITRATION FILING FEE, AND WILL BEAR ALL OTHER COSTS OF ARBITRATION, INCLUDING FEES FOR THE SERVICES OF THE ARBITRATOR AND ANY COURT REPORTER ORDERED BY THE ARBITRATOR. EACH PARTY SHALL BEAR ITS, HIS OR HER OWN COSTS OF LEGAL REPRESENTATION; PROVIDED, HOWEVER, IF ANY PARTY PREVAILS ON A CLAIM ENTITLING THE PREVAILING PARTY TO ATTORNEYS' FEES AND/OR COSTS, THE ARBITRATOR MAY AWARD REASONABLE FEES AND/OR COSTS TO THE PREVAILING PARTY IN ACCORDANCE WITH SUCH CLAIM. JUDGMENT SHALL BE ENTERED ON THE ARBITRATOR'S DECISION IN ANY COURT HAVING JURISDICTION OVER THE SUBJECT MATTER OF SUCH DISPUTE OR CONTROVERSY. NOTWITHSTANDING THE FOREGOING, EITHER PARTY MAY IN AN APPROPRIATE MATTER APPLY TO A COURT PURSUANT TO CALIFORNIA CODE OF CIVIL PROCEDURE SECTION 1281.8, OR ANY COMPARABLE STATUTORY PROVISION OR COMMON LAW PRINCIPLE, FOR PROVISIONAL RELIEF, INCLUDING A TEMPORARY RESTRAINING ORDER OR A PRELIMINARY INJUNCTION. TO THE EXTENT PERMITTED BY LAW, THE PROCEEDINGS AND RESULTS, INCLUDING THE ARBITRATOR'S DECISION, SHALL BE KEPT CONFIDENTIAL TO THE EXTENT PERMITTED BY APPLICABLE LAW.

10. **Remaining Terms**. The remaining terms and conditions of Board Member's award are governed by the Plan, and Board Member's award is also subject to all interpretations, amendments, rules, regulations and decisions that may from time to time exist, be adopted or made under and pursuant to the Plan. The General Plan Description, which is the official prospectus summarizing the principal features of the Plan, has previously been provided to Board Member or is provided with this Agreement.

(Signature Page Follows)

IN WITNESS WHEREOF, the undersigned have executed this Agreement effective on the date first set above.

COMPANY:

PACIFIC ETHANOL, INC.,
a Delaware corporation

By: _____
Christopher W. Wright
Vice President, General Counsel and Secretary

I, the undersigned Board Member, hereby acknowledge receiving, reading and understanding the General Plan Description, which is the official prospectus summarizing the principal features of the Plan, this Agreement and the Plan itself. I further acknowledge and accept the foregoing terms and conditions of the Restricted Stock award evidenced hereby. I also acknowledge and agree that the foregoing sets forth the entire understanding between the Company and me regarding my entitlement to receive the shares of the Company's Common Stock subject to such award and supersedes all prior oral and written agreements on that subject.

BOARD MEMBER: _____

Print: _____

Exhibit 10.7

Pacific Ethanol, Inc.

AMENDED AND RESTATED
EMPLOYMENT AGREEMENT
for
NEIL M. KOEHLER

This Amended and Restated Employment Agreement ("Agreement") by and between Neil M. Koehler ("Employee") and Pacific Ethanol, Inc. (the "Company") (collectively, the "Parties") is effective as of the last date signed by the Parties.

Whereas, the Company desires to employ Employee to provide personal services to the Company, and wishes to provide Employee with certain compensation and benefits in return for his services;

Whereas, Employee wishes to be employed by the Company and to provide personal services to the Company in return for certain compensation and benefits;

Whereas, the Parties entered into an Employment Agreement dated December 14, 2007 (the "Prior Agreement") setting forth the terms of Employee's employment with the Company and now seek to supersede and replace the Prior Agreement with this Agreement; and

Now, Therefore, in consideration of the mutual promises and covenants contained herein, it is hereby agreed by and between the parties hereto as follows:

1. Employment by the Company.

1.1 Position. Subject to terms and conditions set forth herein, the Company agrees to employ Employee in the positions of Chief Executive Officer and President and Employee hereby accepts such employment. During the term of Employee's employment with the Company, Employee will devote Employee's best efforts and substantially all of Employee's business time and attention to the business of the Company.

1.2 Duties and Location. Employee shall perform such duties as are customarily associated with Employee's then current title. Employee's primary office location shall be a location mutually acceptable to both the Employee and the Company. The Company reserves the right to reasonably require Employee to perform Employee's duties at places other than Employee's primary office location from time to time as agreed to by Employee, and to require reasonable business travel.

1.3 Policies and Procedures. The employment relationship between the parties shall be governed by the general employment policies and practices of the Company, except that when the terms of this Agreement differ from or are in conflict with the Company's general employment policies or practices, this Agreement shall control.

2. Compensation.

2.1 Salary. For services to be rendered hereunder, Employee shall receive a bi-weekly salary of $17,739.10**,** approximately $461,217.00 on an annualized basis (the "Base Salary"), subject to standard payroll deductions and withholdings and payable in accordance with the Company's regular payroll schedule. Employee's Base Salary shall be reviewed annually and may be increased as approved by the Company's Board of Directors (the "Board") in its sole discretion.

2.2 Short Term Incentive. Employee shall be entitled to participate in the Company's Short Term Incentive plan ("STI") with a payout target of seventy percent (70%) of Employee's Base Salary. The structure of the STI from time to time, whether any STI payout will be awarded, and the amount of the STI awarded to Employee, shall be in the discretion of the Compensation Committee of the Board. Since the STI award is intended both to reward past Company and Employee performance and to provide an incentive for Employee to remain with the Company, Employee must remain an active employee through the date that any such STI award is paid in order to be entitled to receive any such award, except as otherwise provided in Section 5.2. Employee will not be paid any STI award (including a prorated award) if Employee's employment terminates for any reason before the STI is paid to him, except as otherwise provided in Section 5.2. Any earned STI shall be paid, if at all, not later than March 15th of the year following the calendar year as to which performance was measured.

2.3 Employee Benefits, Stock Options, And Incentive Compensation, And Other Compensation Plans And Programs. Employee shall be entitled to participate in such of the Company's benefit and deferred compensation plans and programs as may be made available to employees of the Company, including, without limitation, the Company's Long Term Incentive Plan, subject in each case to: (i) the generally applicable terms and conditions of the applicable plan or program and to the determinations of the Board or other person administering such plan or program, (ii) determinations by the Board or any such person as to whether and to what extent Employee shall so participate or cease to participate, and (iii) amendment, modification or termination of any such plan or program in the sole and absolute discretion of the Board. Notwithstanding the foregoing, Employee shall not be entitled to be paid any accrued but unused vacation pay that is not used in the ordinary course in accordance with the Company's vacation pay policy.

3. Confidential Information Obligations.

3.1 Confidential Information Agreement. As a condition of employment, Employee agrees to execute and abide by the Employee Confidential Information and Inventions Agreement attached hereto as Exhibit A.

3.2 Third Party Agreements and Information. Employee represents and warrants that Employee's employment by the Company will not conflict with any prior employment or consulting agreement or other agreement with any third party, and that Employee will perform Employee's duties to the Company without violating any such agreement. Employee represents and warrants that Employee does not possess confidential information arising out of prior employment, consulting, or other third party relationships, which would be used in connection with Employee's employment by the Company, except as expressly authorized by that third party. During Employee's employment by the Company, Employee will use in the performance of Employee's duties only information which is generally known and used by persons with training and experience comparable to Employee's own, common knowledge in the industry, otherwise legally in the public domain, or obtained or developed by the Company or by Employee in the course of Employee's work for the Company.

4. Outside Activities During Employment.

4.1 Non-Company Business. Except with the prior written consent of the Chief Executive Officer (in consultation with the General Counsel), Employee will not during the term of Employee's employment with the Company undertake or engage in any other employment, occupation or business enterprise, other than ones in which Employee is a passive investor. Employee may also engage in civic and not-for-profit activities so long as such activities do not materially interfere with the performance of Employee's duties hereunder.

4.2 No Adverse Interests. Employee agrees not to acquire, assume or participate in, directly or indirectly, any position, investment or interest known by him to be adverse or antagonistic to the Company, its business or prospects, financial or otherwise, except as a passive investor in mutual or exchange traded funds.

5. Termination Of Employment.

5.1 At-Will Relationship. Employee's employment relationship is at-will. Either Employee or the Company may terminate the employment relationship at any time, with or without Cause or advance notice.

5.2 Termination without Cause; Resignation for Good Reason. If, at any time, the Company terminates Employee's employment without Cause (as defined herein), or Employee resigns with Good Reason (as defined herein), and, within sixty (60) days after the Employee's Separation Date (as defined below), Employee executes and delivers the Separation Date Release of all claims set forth as Exhibit B hereto and allows such release to become effective without revoking same, then the Company will provide Employee with the following severance benefits (notwithstanding the foregoing, if any of the following severance benefits are subject to Section 409A (as defined below) and the sixty (60)-day period for executing the release and it becoming effective spans more than one calendar year, none of such severance benefits may be paid or delivered until the subsequent calendar year):

(a) Cash Severance.

(i) Qualifying Termination. Except as otherwise set forth in Section 5.2(a)(ii), in the event the Company terminates Employee's employment without Cause, or Employee resigns with Good Reason, other than in anticipation of, or on or within twenty-four (24) months after, a Change in Control (as defined below), the Company shall pay Employee severance in an amount equal to the sum of (A) eighteen (18) months of Employee's Base Salary in effect on Employee's last day of employment (the "Separation Date"); and (B) 150% of the total target STI award contemplated by the Company's STI in effect on the Separation Date.

(ii) Change in Control. Notwithstanding Section 5.2(a)(i), in the event the Company terminates Employee's employment without Cause, or Employee resigns with Good Reason, in anticipation of, or on or within twenty-four (24) months after, a Change in Control, then the Company shall pay Employee severance in an amount equal to the sum of (C) thirty-six (36) months of Employee's Base Salary in effect on the Separation Date; and (D) 300% of the total target STI award contemplated by the Company's STI in effect on the Separation Date. For purposes of this Agreement, the Company will be deemed to have terminated Employee's employment, and Employee will be deemed to have resigned for Good Reason, in each case "in anticipation of" a Change in Control if Employee's employment terminates (i) prior to the Change in Control and (ii) during any period in which the Company has (A) initiated a transaction process or is engaged in substantive discussions with a third party about a specific transaction that, if consummated, would result in a Change in Control (and before the complete abandonment of such discussions without the transaction being consummated), or (B) become a party to a definitive agreement to consummate a transaction that would result in a Change in Control (and before the complete termination of such agreement without the transaction being consummated).

(iii) Payment. The cash severance shall be paid in a single lump sum as soon as administratively practicable after the effective date of the release of claims described in Section 5.2 (except as otherwise set forth above) but in no event later than the 15th day of the third month immediately following the end of the calendar year in which Employee's Separation Date occurs (subject to standard deductions and withholdings).

(b) Continued Health Insurance Coverage. To the extent provided by the federal COBRA law or, if applicable, state insurance laws, and by the Company's then-current group health insurance policies, Employee may be eligible to continue Employee's then-current group health insurance benefits after termination of Employment. If eligible and if Employee timely elects continued health insurance coverage, in the event the Company terminates Employee's employment without Cause, or Employee resigns with Good Reason, other than in anticipation of, or on or within twenty-four (24) months after, a Change in Control then the Company shall pay, on a monthly basis, the Company's portion of any premiums necessary to provide such coverage for a period of eighteen (18) months after the Employee's Separation Date; **provided, however,** that no such premium payments shall be made following the effective date of Employee's coverage by a medical, dental or vision insurance plan of a subsequent employer. Employee shall notify the Company immediately if he becomes covered by a medical, dental or vision insurance plan of a subsequent employer. Notwithstanding the foregoing, in the event the Company terminates Employee's employment without Cause, or Employee resigns with Good Reason, in anticipation of, or within twenty-four (24) months on or after, a Change in Control, then (if eligible and coverage elected) the Company shall pay, on a monthly basis, the Company's portion of any premiums necessary to provide such coverage for a period of thirty-six (36) months after the Employee's Separation Date or, if earlier, until the termination of Employee's eligibility for such COBRA or, if applicable, state insurance laws, coverage; **provided, however,** that no such premium payments shall be made following the effective date of Employee's coverage by a medical, dental or vision insurance plan of a subsequent employer and Employee agrees to immediately notify the Company of any such coverage. In the event Employee is entitled to receive such coverage for a period of thirty-six (36) months after the Employee's Separation Date but Employee's right to such COBRA or, if applicable, state insurance laws, coverage expires in the ordinary course (and other than in connection with Employee's coverage by a medical, dental or vision insurance plan of a subsequent employer or as the result of any action or inaction of Employee, such as but not limited to Employee's failure to pay Employee's portion of the premiums), then, the Company shall pay, on a monthly basis, to Employee (subject to standard deductions and withholdings) a cash payment equal to the portion of the premiums the Company was paying prior to expiration of such coverage for each month after such coverage expires through thirty-six (36) months after the Employee's Separation Date, **provided, however,** that no such cash payments shall be made following the effective date of Employee's coverage by a medical, dental or vision insurance plan of a subsequent employer and Employee agrees to immediately notify the Company of any such coverage. Notwithstanding the foregoing, Employee's receipt of any amounts under this subsection are contingent upon the release of claims described in Section 5.2, so Employee may pay such amounts during this period and the Company will reimburse such amounts as soon as administratively practicable after the effective date of the release of claims described in Section 5.2 (except as otherwise set forth above) but in no event later than the 15th day of the third month immediately following the end of the calendar year in which Employee's Separation Date occurs.

(c) Accelerated Vesting. If Employee has been employed by the Company as of the Separation Date for one full year or longer, and the Company terminates Employee's employment without Cause, or Employee resigns with Good Reason, other than in anticipation of, or on or within twenty-four (24) months after, a Change in Control, then the Company will accelerate the vesting of any equity awards granted to Employee prior to Employee's Separation Date such that twenty-five percent (25%) of all shares or options subject to such awards which are unvested as of the Employee's Separation Date shall be accelerated and deemed fully vested as of the effective date of the release of claims described in Section 5.2 (except as otherwise set forth above); **provided, however**, that in the event, and without the requirement that Employee be employed for one full year or longer, the Company terminates Employee's employment without Cause, or Employee resigns with Good Reason, in anticipation of, or within twenty-four (24) months after, a Change in Control, then the Company will accelerate the vesting of any equity awards granted to Employee prior to Employee's employment termination such that one hundred percent (100%) of all shares or options subject to such awards which are unvested as of the Employee's Separation Date shall be accelerated and deemed fully vested as of the effective date of the release of claims described in Section 5.2 (except as otherwise set forth above).

5.3 Termination for Cause; Resignation Without Good Reason. If the Company terminates Employee's employment with the Company for Cause, or Employee resigns without Good Reason, then Employee will not be entitled to any further compensation from the Company (other than accrued salary through Employee's last day of employment which will be paid in the ordinary course and any vested benefits under the Company's benefit plans in which Employee participated prior to the Separation Date in accordance with the terms of such plans), including severance pay, pay in lieu of notice or any other such compensation.

5.4 Termination Due to Death or Disability.

(a) Death. This Agreement and Employee's employment shall terminate immediately upon Employee's death and Employee's estate shall not be entitled to any further compensation from the Company (other than accrued salary through Employee's last day of employment which will be paid in the ordinary course and any vested benefits under the Company's benefit plans in which Employee participated prior to the Separation Date in accordance with the terms of such), including severance pay, pay in lieu of notice or any other such compensation.

(b) Disability. If Employee is prevented from performing his duties as described in Section 1.1 of this Agreement by reason of any physical or mental incapacity, with or without reasonable accommodation, that results in Employee's satisfaction of all requirements necessary to receive benefits under the Company's long-term disability plan due to a total disability, then, to the extent permitted by law, the Company may terminate the employment of Employee and this Agreement at such time. In such an event, and if Employee or someone authorized to act on his behalf executes and delivers the Separation Date Release described in section 5.2 and allows such release to become effective, within the timeframe set forth above, then the Company shall pay Employee severance in a single lump sum equal to twelve (12) months of Employee's Base Salary in effect on Employee's Separation Date. This severance shall be paid on the Company's first regular payroll schedule (subject to standard deductions and withholdings) after the effective date of the release of claims (or as otherwise set forth above in connection with such release as described above) but in no event later than the 15th day of the third month immediately following the end of the calendar year in which Employee's Separation Date occurs. The severance benefits provided for in this Section 5.4 shall be reduced by any amounts expected to be paid to Employee in connection with any federal or state disability insurance payments or benefits, and any private insurance disability payments or benefits, to be provided to Employee within the twelve (12) months following Employee's Separation Date.

5.5 Deferred Compensation. Notwithstanding anything to the contrary set forth herein, any payments and benefits provided under this Agreement (the "Severance Benefits") that constitute "deferred compensation" within the meaning of Section 409A of the Internal Revenue Code of 1986, as amended (the "Code") and the regulations and other guidance thereunder and any state law of similar effect (collectively "Section 409A") shall not commence in connection with Employee's termination of employment unless and until Employee has also incurred a "separation from service" (as such term is defined in Treasury Regulation Section 1.409A-1(h) ("Separation From Service"), unless the Company reasonably determines that such amounts may be provided to Employee without causing Employee to incur the additional 20% tax under Section 409A.

It is intended that each installment of the Severance Benefits payments provided for in this Agreement is a separate "payment" for purposes of Treasury Regulation Section 1.409A-2(b)(2)(i). For the avoidance of doubt, it is intended that payments of the Severance Benefits set forth in this Agreement satisfy, to the greatest extent possible, the exemptions from the application of Section 409A provided under Treasury Regulation Sections 1.409A-1(b)(4), 1.409A-1(b)(5) and 1.409A-1(b)(9).

If Employee is a "specified employee" within the meaning of 409A(a)(2)(B)(i) of the Code, no Severance Benefit payments that are nonqualified deferred compensation subject to Section 409A and are triggered by a separation from service shall be paid until the later of six (6) months after Employee's Separation Date of, if earlier, Employee's death. All such payments will be accumulated and paid within thirty (30) days after the expiration of such delay period. However, it is intended that payments to Employee will be exempt from Section 409A under the "short-term deferral" rule set forth in Section 1.409A-1(b)(4) of the Treasury Regulations and not likely to be delayed pursuant to this provision.

Notwithstanding any other payment schedule set forth in this Agreement, none of the Severance Benefits will be paid or otherwise delivered prior to the effective date of the Separation Date Release of all claims set forth as Exhibit B hereto. All amounts payable under the Agreement will be subject to standard payroll taxes and deductions. Notwithstanding any other provision of this Agreement, the Company shall not be liable to Employee or any other person if payments under this Agreement fail to be exempt from, or compliant with, Section 409A. Employee is solely responsible for the tax consequences of any payments hereunder.

5.6 Limitation on Payments. In the event that the payments or other benefits provided for in this Agreement or otherwise payable to Employee (i) constitute "parachute payments" within the meaning of Section 280G of the Code, and (ii) would be subject to the excise tax imposed by Section 4999 of the Code (the "Excise Tax"), then Employee's benefits under this Agreement shall be either (a) delivered in full, or (b) delivered to such lesser extent which would result in no portion of such benefits being subject to the Excise Tax, whichever of the foregoing amounts, taking into account the applicable federal, state and local income taxes and the Excise Tax, results in the receipt by Employee on an after-tax basis, of the greatest amount of benefits, notwithstanding that all or some portion of such benefits may be taxable under Section 4999 of the Code. If a reduction in payments or benefits constituting "parachute payments" is necessary pursuant to the foregoing provision, reduction shall occur pro rata in the following order: reduction of cash payments; cancellation of accelerated vesting of stock awards; reduction of employee benefits. If acceleration of vesting of stock award compensation is to be reduced, such acceleration of vesting shall be cancelled in the reverse order of the date of grant of the Employee's stock awards.

5.7 No Mitigation. Employee shall not be required to mitigate damages or the amount of any payment provided for under this Agreement by seeking other employment or otherwise, nor shall the amount of any payment provided for under this Agreement be reduced by any compensation earned by Employee as the result of employment by another employer after the date of termination, or otherwise, except for health insurance benefits as set forth herein.

5.8 Definitions.

(a) For purposes of this Agreement, "**Cause**" shall mean any one or more of the following:

(i) Employee's indictment or conviction of any felony or of any crime involving dishonesty;

(ii) Employee's participation in any fraud or other act of willful misconduct against the Company (including any material breach of Company policy that causes or reasonably could cause harm to the Company);

(iii) Employee's refusal to comply with any lawful directive of the Company;

(iv) Employee's material breach of Employee's fiduciary, statutory, contractual, or common law duties to the Company (including any material breach of this Agreement or the Confidential Information and Inventions Agreement); or

(v) Conduct by Employee which in the good faith and reasonable determination of the Board demonstrates gross unfitness to serve.

Provided, however, that in the event that any of the foregoing events is reasonably capable of being cured, the Company shall, within twenty (20) days after the discovery of such event, provide written notice to the Employee describing the nature of such event and Employee shall thereafter have ten (10) business days to cure such event.

(b) For purposes of this Agreement, Employee shall have "**Good Reason"** for Employee's resignation if: (w) any of the following occurs without Employee's consent; (x) Employee notifies the Company in writing, within twenty (20) days after the occurrence of one of the following events that Employee intends to terminate his employment no earlier than thirty (30) days after providing such notice; (y) the Company does not cure such condition within thirty (30) days following its receipt of such notice or states unequivocally in writing that it does not intend to attempt to cure such condition, and (z) the Employee resigns from employment within thirty (30) days following the end of the period within which the Company was entitled to remedy the condition constituting Good Reason but failed to do so:

(i) the assignment to Employee of any duties or responsibilities which result in the material diminution of Employee's authority, duties or responsibility; **provided, however,** that the acquisition of the Company and subsequent conversion of the Company to a division or unit of the acquiring corporation will not by itself result in a material diminution of Employee's authority, duties or responsibility;

(ii) a material reduction by the Company in Employee's annual base salary, except to the extent the base salaries of all other executive officers of the Company are accordingly reduced;

(iii) a relocation of Employee's place of work, or the Company's principal executive offices if Employee's principal office is at such offices, to a location that increases Employee's daily one-way commute by more than thirty-five (35) miles; or

(iv) any material breach by the Company of any material provision of this Agreement, including but not limited to Section 7.7.

(c) For purposes of this Agreement, **"Change in Control"** shall be deemed to have occurred if, in a single transaction or series of related transactions: (i) any person (as such term is used in Section 13(d) and 14(d) of the Securities Exchange Act of 1934 ("Exchange Act")), or persons acting as a group, other than a trustee or fiduciary holding securities under an employment benefit program, is or becomes a "beneficial owner" (as defined in Rule 13-3 under the Exchange Act), directly or indirectly of securities of the Company representing a majority (*e.g.*, 50% plus one share) of the combined voting power of the Company, (ii) there is a merger, consolidation or other business combination transaction of the Company with or into another corporation, entity or person, other than a transaction in which the holders of at least a majority of the shares of voting capital stock of the Company outstanding immediately prior to such transaction continue to hold (either by such shares remaining outstanding or by their being converted into shares of voting capital stock of the surviving entity) a majority of the total voting power represented by the shares of voting capital stock of the Company (or the surviving entity) outstanding immediately after such transaction, or (iii) all or substantially all of the Company's assets are sold.

6. Arbitration.

To ensure the timely and economical resolution of disputes that may arise in connection with Employee's employment with the Company, Employee and the Company agree that any and all disputes, claims, or causes of action arising from or relating to the enforcement, breach, performance, negotiation, execution, or interpretation of this Agreement, Employee's employment, or the termination of Employee's employment, shall be resolved to the fullest extent permitted by law by final, binding and confidential arbitration, by a single arbitrator, in Sacramento, California, conducted by JAMS under the then applicable JAMS rules. **By agreeing to this arbitration procedure, both Employee and the Company waive the right to resolve any such dispute through a trial by jury or judge or administrative proceeding.** The arbitrator shall: (a) have the authority to compel adequate discovery for the resolution of the dispute and to award such relief as would otherwise be permitted by law; and (b) issue a written arbitration decision, to include the arbitrator's essential findings and conclusions and a statement of the award. The arbitrator shall be authorized to award any or all remedies that Employee or the Company would be entitled to seek in a court of law. The Company shall pay all JAMS' arbitration fees in excess of the amount of court fees that would be required if the dispute were decided in a court of law. Nothing in this Agreement is intended to prevent either Employee or the Company from obtaining injunctive relief in court to prevent irreparable harm pending the conclusion of any such arbitration.

7. General Provisions.

7.1 Notices. Any notices provided hereunder must be in writing and shall be deemed effective upon the earlier of personal delivery (including personal delivery by fax) or the next day after sending by overnight carrier, to the Company at its primary office location and to Employee at his address as listed on the Company payroll.

7.2 Severability. Whenever possible, each provision of this Agreement will be interpreted in such manner as to be effective and valid under applicable law, but if any provision of this Agreement is held to be invalid, illegal or unenforceable in any respect under any applicable law or rule in any jurisdiction, such invalidity, illegality or unenforceability will not affect any other provision or any other jurisdiction, but this Agreement will be reformed, construed and enforced in such jurisdiction to the extent possible in keeping with the intent of the parties.

7.3 Waiver. Any waiver of any breach of any provisions of this Agreement must be in writing to be effective, and it shall not thereby be deemed to have waived any preceding or succeeding breach of the same or any other provision of this Agreement.

7.4 Complete Agreement. This Agreement, including Exhibit A, constitutes the entire agreement between Employee and the Company and it is the complete, final, and exclusive embodiment of their agreement with regard to this subject matter. This Agreement supersedes and replaces the Prior Agreement in its entirety and the Prior Agreement shall have no further force or effect. It is entered into without reliance on any promise or representation other than those expressly contained herein, and it cannot be modified or amended except in a writing signed by the Employee and a duly authorized officer of the Company.

7.5 Counterparts. This Agreement may be executed in separate counterparts, any one of which need not contain signatures of more than one party, but all of which taken together will constitute one and the same Agreement.

7.6 Headings. The headings of the sections hereof are inserted for convenience only and shall not be deemed to constitute a part hereof nor to affect the meaning thereof.

7.7 Successors and Assigns. This Agreement is intended to bind and inure to the benefit of and be enforceable by Employee and the Company, and their respective successors, assigns, heirs, executors and administrators, except that Employee may not assign any of his duties hereunder and he may not assign any of his rights hereunder without the written consent of the Company, which shall not be withheld unreasonably. The Company shall obtain the assumption of this Agreement by any successor or assign of the Company.

7.8 Choice of Law. All questions concerning the construction, validity and interpretation of this Agreement will be governed by the law of the State of California.

In Witness Whereof, the parties have executed this Agreement.

Pacific Ethanol, Inc.

By: /s/ Ed Baker
Ed Baker
Vice President, Human Resources

Date: November 7, 2016

Understood and Agreed:

Employee

/s/ Neil M. Koehler
Neil M. Koehler

Date: November 7, 2016

Exhibit A

EMPLOYEE CONFIDENTIAL INFORMATION AND INVENTIONS ASSIGNMENT AGREEMENT

In consideration of my employment or continued employment by Pacific Ethanol, Inc. ("**Company**"), and the compensation paid to me now and during my employment with the Company, I agree to the terms of this Agreement as follows:

1. Confidential Information Protections.

1.1 Nondisclosure; Recognition of Company's Rights. At all times during and after my employment, I will hold in confidence and will not disclose, use, lecture upon, or publish any of Company's Confidential Information (defined below), except as may be required in connection with my work for Company, or as expressly authorized by the Chief Executive Officer (the "**CEO**") of Company. I will obtain the CEO's written approval before publishing or submitting for publication any material (written, oral, or otherwise) that relates to my work at Company and/or incorporates any Confidential Information. I hereby assign to Company any rights I may have or acquire in any and all Confidential Information and recognize that all Confidential Information shall be the sole and exclusive property of Company and its assigns.

1.2 Confidential Information. The term "**Confidential Information**" shall mean any and all confidential knowledge, data or information related to Company's business or its actual or demonstrably anticipated research or development, including without limitation (a) trade secrets, inventions, ideas, processes, computer source and object code, data, formulae, programs, other works of authorship, know-how, improvements, discoveries, developments, designs, and techniques; (b) information regarding products, services, plans for research and development, marketing and business plans, budgets, financial statements, contracts, prices, suppliers, and customers; (c) information regarding the skills and compensation of Company's employees, contractors, and any other service providers of Company; and (d) the existence of any business discussions, negotiations, or agreements between Company and any third party.

1.3 Third Party Information. I understand that Company has received and in the future will receive from third parties confidential or proprietary information (**"Third Party Information"**) subject to a duty on Company's part to maintain the confidentiality of such information and to use it only for certain limited purposes. During and after the term of my employment, I will hold Third Party Information in strict confidence and will not disclose to anyone (other than Company personnel who need to know such information in connection with their work for Company) or use, Third Party Information, except in connection with my work for Company or unless expressly authorized by an officer of Company in writing.

1.4 No Improper Use of Information of Prior Employers and Others. I represent that my employment by Company does not and will not breach any agreement with any former employer, including any noncompete agreement or any agreement to keep in confidence or refrain from using information acquired by me prior to my employment by Company. I further represent that I have not entered into, and will not enter into, any agreement, either written or oral, in conflict with my obligations under this Agreement. During my employment by Company, I will not improperly make use of, or disclose, any information or trade secrets of any former employer or other third party, nor will I bring onto the premises of Company or use any unpublished documents or any property belonging to any former employer or other third party, in violation of any lawful agreements with that former employer or third party. I will use in the performance of my duties only information that is generally known and used by persons with training and experience comparable to my own, is common knowledge in the industry or otherwise legally in the public domain, or is otherwise provided or developed by Company.

2. Inventions.

2.1 Inventions and Intellectual Property Rights. As used in this Agreement, the term **"Invention"** means any ideas, concepts, information, materials, processes, data, programs, know-how, improvements, discoveries, developments, designs, artwork, formulae, other copyrightable works, and techniques and all Intellectual Property Rights in any of the items listed above. The term **"Intellectual Property Rights"** means all trade secrets, copyrights, trademarks, mask work rights, patents and other intellectual property rights recognized by the laws of any jurisdiction or country.

2.2 Prior Inventions. I have disclosed on **Exhibit A** a complete list of all Inventions that (a) I have, or I have caused to be, alone or jointly with others, conceived, developed, or reduced to practice prior to the commencement of my employment by Company; (b) in which I have an ownership interest or which I have a license to use; (c) and that I wish to have excluded from the scope of this Agreement (collectively referred to as "**Prior Inventions**"). If no Prior Inventions are listed in **Exhibit A**, I warrant that there are no Prior Inventions. I agree that I will not incorporate, or permit to be incorporated, Prior Inventions in any Company Inventions (defined below) without Company's prior written consent. If, in the course of my employment with Company, I incorporate a Prior Invention into a Company process, machine or other work, I hereby grant Company a non-exclusive, perpetual, fully-paid and royalty-free, irrevocable and worldwide license, with rights to sublicense through multiple levels of sublicensees, to reproduce, make derivative works of, distribute, publicly perform, and publicly display in any form or medium, whether now known or later developed, make, have made, use, sell, import, offer for sale, and exercise any and all present or future rights in, such Prior Invention.

2.3 Assignment of Company Inventions. Inventions assigned to the Company or to a third party as directed by the Company pursuant to the section titled "Government or Third Party" are referred to in this Agreement as "**Company Inventions**." Subject to the section titled "Government or Third Party" and except for Inventions that I can prove qualify fully under the provisions of California Labor Code section 2870 and I have set forth in **Exhibit A**, I hereby assign and agree to assign in the future (when any such Inventions or Intellectual Property Rights are first reduced to practice or first fixed in a tangible medium, as applicable) to Company all my right, title, and interest in and to any and all Inventions (and all Intellectual Property Rights with respect thereto) made, conceived, reduced to practice, or learned by me, either alone or with others, during the period of my employment by Company.

2.4 Obligation to Keep Company Informed. During the period of my employment and for one (1) year after my employment ends, I will promptly and fully disclose to Company in writing (a) all Inventions authored, conceived, or reduced to practice by me, either alone or with others, including any that might be covered under California Labor Code section 2870, and (b) all patent applications filed by me or in which I am named as an inventor or co-inventor.

2.5 Government or Third Party. I agree that, as directed by the Company, I will assign to a third party, including without limitation the United States, all my right, title, and interest in and to any particular Company Invention.

2.6 Enforcement of Intellectual Property Rights and Assistance. During and after the period of my employment, I will assist Company in every proper way to obtain and enforce United States and foreign Intellectual Property Rights relating to Company Inventions in all countries. If the Company is unable to secure my signature on any document needed in connection with such purposes, I hereby irrevocably designate and appoint Company and its duly authorized officers and agents as my agent and attorney in fact, which appointment is coupled with an interest, to act on my behalf to execute and file any such documents and to do all other lawfully permitted acts to further such purposes with the same legal force and effect as if executed by me.

2.7 Incorporation of Software Code. I agree that I will not incorporate into any Company software or otherwise deliver to Company any software code licensed under the GNU General Public License or Lesser General Public License or any other license that, by its terms, requires or conditions the use or distribution of such code on the disclosure, licensing, or distribution of any source code owned or licensed by Company.

3. Records. I agree to keep and maintain adequate and current records (in the form of notes, sketches, drawings and in any other form that is required by the Company) of all Inventions made by me during the period of my employment by the Company, which records shall be available to, and remain the sole property of, the Company at all times.

4. Additional Activities. I agree that (a) during the term of my employment by Company, I will not, without Company's express written consent, engage in any employment or business activity that is competitive with, or would otherwise conflict with my employment by, Company, and (b) for the period of my employment by Company and for one (l) year thereafter, I will not, either directly or indirectly, solicit or attempt to solicit any employee, independent contractor, or consultant of Company to terminate his, her or its relationship with Company in order to become an employee, consultant, or independent contractor to or for any other person or entity.

5. Return Of Company Property. Upon termination of my employment or upon Company's request at any other time, I will deliver to Company all of Company's property, equipment, and documents, together with all copies thereof, and any other material containing or disclosing any Inventions, Third Party Information or Confidential Information and certify in writing that I have fully complied with the foregoing obligation. I agree that I will not copy, delete, or alter any information contained upon my Company computer or Company equipment before I return it to Company. In addition, if I have used any personal computer, server, or e-mail system to receive, store, review, prepare or transmit any Company information, including but not limited to, Confidential Information, I agree to provide the Company with a computer-useable copy of all such Confidential Information and then permanently delete and expunge such Confidential Information from those systems; and I agree to provide the Company access to my system as reasonably requested to verify that the necessary copying and/or deletion is completed. I further agree that any property situated on Company's premises and owned by Company is subject to inspection by Company's personnel at any time with or without notice. Prior to the termination of my employment or promptly after termination of my employment, I will cooperate with Company in attending an exit interview and certify in writing that I have complied with the requirements of this section.

6. Notification Of New Employer. If I leave the employ of Company, I consent to the notification of my new employer of my rights and obligations under this Agreement, by Company providing a copy of this Agreement or otherwise.

7. General Provisions.

7.1 Governing Law and Venue. This Agreement and any action related thereto will be governed and interpreted by and under the laws of the State of California, without giving effect to any conflicts of laws principles that require the application of the law of a different state. I expressly consent to personal jurisdiction and venue in the state and federal courts for the county in which Company's principal place of business is located for any lawsuit filed there against me by Company arising from or related to this Agreement.

7.2 Severability. If any provision of this Agreement is, for any reason, held to be invalid or unenforceable, the other provisions of this Agreement will remain enforceable and the invalid or unenforceable provision will be deemed modified so that it is valid and enforceable to the maximum extent permitted by law.

7.3 Survival. This Agreement shall survive the termination of my employment and the assignment of this Agreement by Company to any successor or other assignee and be binding upon my heirs and legal representatives.

7.4 Employment. I agree and understand that nothing in this Agreement shall give me any right to continued employment by Company, and it will not interfere in any way with my right or Company's right to terminate my employment at any time, with or without cause and with or without advance notice.

7.5 Notices. Each party must deliver all notices or other communications required or permitted under this Agreement in writing to the other party at the address listed on the signature page, by courier, by certified or registered mail (postage prepaid and return receipt requested), or by a nationally-recognized express mail service. Notice will be effective upon receipt or refusal of delivery. If delivered by certified or registered mail, notice will be considered to have been given five (5) business days after it was mailed, as evidenced by the postmark. If delivered by courier or express mail service, notice will be considered to have been given on the delivery date reflected by the courier or express mail service receipt. Each party may change its address for receipt of notice by giving notice of the change to the other party.

7.6 Injunctive Relief. I acknowledge that, because my services are personal and unique and because I will have access to the Confidential Information of Company, any breach of this Agreement by me would cause irreparable injury to Company for which monetary damages would not be an adequate remedy and, therefore, will entitle Company to injunctive relief (including specific performance). The rights and remedies provided to each party in this Agreement are cumulative and in addition to any other rights and remedies available to such party at law or in equity.

7.7 Waiver. Any waiver or failure to enforce any provision of this Agreement on one occasion will not be deemed a waiver of that provision or any other provision on any other occasion.

7.8 Export. I agree not to export, directly or indirectly, any U.S. technical data acquired from Company or any products utilizing such data, to countries outside the United States, because such export could be in violation of the United States export laws or regulations.

7.9 Entire Agreement. If no other agreement governs nondisclosure and assignment of inventions during any period in which I was previously employed or am in the future employed by Company as an independent contractor, the obligations pursuant to sections of this Agreement titled "Confidential Information Protections" and "Inventions" shall apply. This Agreement is the final, complete and exclusive agreement of the parties with respect to the subject matter hereof and supersedes and merges all prior communications between us with respect to such matters. No modification of or amendment to this Agreement, or any waiver of any rights under this Agreement, will be effective unless in writing and signed by me and the CEO of Company. Any subsequent change or changes in my duties, salary or compensation will not affect the validity or scope of this Agreement.

This Agreement shall be effective as of the first day of my employment with Company.

EMPLOYEE:

I have read, understand, and Accept this agreement and have been given the opportunity to Review it with independent legal counsel.

_____
(Signature)

By: _____

Title: _____

Date: _____

Address: _____

COMPANY:

Accepted and agreed:

_____
(Signature)

By: _____

Title: _____

Date: _____

Address: _____

EXHIBIT A

INVENTIONS

1. Prior Inventions Disclosure. The following is a complete list of all Prior Inventions (as provided in Section 2.2 of the attached Employee Confidential Information and Inventions Assignment Agreement, defined herein as the "Agreement"):

[_] None

[_] See immediately below:

_____

_____

2. Limited Exclusion Notification.

This is to notify you in accordance with Section 2872 of the California Labor Code that the foregoing Agreement between you and Company does not require you to assign or offer to assign to Company any Invention that you develop entirely on your own time without using Company's equipment, supplies, facilities or trade secret information, except for those Inventions that either:

a . Relate at the time of conception or reduction to practice to Company's business, or actual or demonstrably anticipated research or development; or

b. Result from any work performed by you for Company.

To the extent a provision in the foregoing Agreement purports to require you to assign an Invention otherwise excluded from the preceding paragraph, the provision is against the public policy of this state and is unenforceable.

This limited exclusion does not apply to any patent or Invention covered by a contract between Company and the United States or any of its agencies requiring full title to such patent or Invention to be in the United States.

Exhibit B

Separation Date Release

(To be signed and become effective on or within 60 days after the employment termination date.)

In exchange for the severance benefits to be provided to me by Pacific Ethanol, Inc. (the "Company") pursuant to the terms of my Employment Agreement (the "Agreement"), I hereby provide the following General Release of Claims (the "Release"). I understand that, on the last date of my employment with the Company, the Company will pay me any accrued salary to which I am entitled by law, regardless of whether I sign this Release, but I am not entitled to any severance benefits unless I sign and return this Release to the Company and I allow it to become effective.

I hereby generally and completely release the Company and its directors, officers, employees, shareholders, partners, agents, attorneys, predecessors, successors, parent and subsidiary entities, insurers, affiliates, and assigns (collectively the "Released Parties") of and from any and all claims, liabilities and obligations, both known and unknown, arising out of or in any way related to events, acts, conduct, or omissions occurring at any time prior to or at the time that I sign this Release.

This general release includes, but is not limited to: (1) all claims arising out of or in any way related to my employment with the Company or the termination of that employment; (2) all claims related to my compensation or benefits from the Company, including salary, incentive awards, bonuses, commissions, vacation pay, expense reimbursements, severance pay, fringe benefits, stock, stock options, or any other ownership or equity interests in the Company; (3) all claims for breach of contract, wrongful termination, and breach of the implied covenant of good faith and fair dealing (including claims based on or arising under the Agreement); (4) all tort claims, including claims for fraud, defamation, emotional distress, and discharge in violation of public policy; and (5) all federal, state, and local statutory claims, including claims for discrimination, harassment, retaliation, attorneys' fees, or other claims arising under the federal Civil Rights Act of 1964 (as amended), the federal Americans with Disabilities Act of 1990, the federal Age Discrimination in Employment Act (as amended) ("ADEA"), the federal Family and Medical Leave Act, the California Labor Code (as amended), the California Family Rights Act, and the California Fair Employment and Housing Act (as amended).

I understand that notwithstanding the foregoing, the following are not included in the Released Claims (the "Excluded Claims"): (i) any rights or claims for indemnification I may have pursuant to any written indemnification agreement to which I am a party, the charter, bylaws, or operating agreements of any of the Released Parties, or under applicable law; or (ii) any rights which are not waivable as a matter of law. In addition, I understand that nothing in this release prevents me from filing, cooperating with, or participating in any proceeding before the Equal Employment Opportunity Commission, the Department of Labor, or the California Department of Fair Employment and Housing, except that I acknowledge and agree that I shall not recover any monetary benefits in connection with any such claim, charge or proceeding with regard to any claim released herein. I hereby represent and warrant that, other than the Excluded Claims, I am not aware of any claims I have or might have against any of the Released Parties that are not included in the Released Claims.

I acknowledge that I am knowingly and voluntarily waiving and releasing any rights I may have under the ADEA, and that the consideration given for the waiver and release in the preceding paragraph is in addition to anything of value to which I am already entitled. I further acknowledge that I have been advised by this writing that: (1) my waiver and release do not apply to any rights or claims that may arise after the date I sign this Release; (2) I should consult with an attorney prior to signing this Release (although I may choose voluntarily not to do so); (3) I have forty-five (45) days to consider this Release (although I may choose voluntarily to sign it earlier); (4) I have seven (7) days following the date I sign this Release to revoke it by providing written notice of revocation to the Company's Chief Executive Officer; and (5) this Release will not be effective until the date upon which the revocation period has expired, which will be the eighth calendar day after the date I sign it provided that I do not revoke it (the "Effective Date").

I UNDERSTAND THAT THIS AGREEMENT INCLUDES A RELEASE OF ALL KNOWN AND UNKNOWN CLAIMS. I acknowledge that I have read and understand Section 1542 of the California Civil Code which reads as follows: **"A general release does not extend to claims which the creditor does not know or suspect to exist in his or her favor at the time of executing the release, which if known by him or her must have materially affected his or her settlement with the debtor."** I hereby expressly waive and relinquish all rights and benefits under that section and any law or legal principle of similar effect in any jurisdiction with respect to my release of claims herein, including but not limited to the release of unknown and unsuspected claims.

I hereby represent that I have been paid all compensation owed and for all hours worked, I have received all the leave and leave benefits and protections for which I am eligible, pursuant to the Family and Medical Leave Act, the California Family Rights Act, or otherwise, and I have not suffered any on-the-job injury for which I have not already filed a workers' compensation claim.

I further agree: (1) not to disparage the Company, its parent, or its or their officers, directors, employees, shareholders, affiliates and agents, in any manner likely to be harmful to its or their business, business reputation, or personal reputation (although I may respond accurately and fully to any question, inquiry or request for information as required by legal process); (2) not to voluntarily (except in response to legal compulsion) assist any third party in bringing or pursuing any proposed or pending litigation, arbitration, administrative claim or other formal proceeding against the Company, its parent or subsidiary entities, affiliates, officers, directors, employees or agents; and (3) to reasonably cooperate with the Company, by voluntarily (without legal compulsion) providing accurate and complete information, in connection with the Company's actual or contemplated defense, prosecution, or investigation of any claims or demands by or against third parties, or other matters, arising from events, acts, or failures to act that occurred during the period of my employment by the Company.

By: _____
Date

Exhibit 10.8

Pacific Ethanol, Inc.

AMENDED AND RESTATED
EMPLOYMENT AGREEMENT
for
CHRISTOPHER W. WRIGHT

This Amended and Restated Employment Agreement ("Agreement") by and between Christopher W. Wright ("Employee") and Pacific Ethanol, Inc. (the "Company") (collectively, the "Parties") is effective as of the last date signed by the Parties.

Whereas, the Company desires to employ Employee to provide personal services to the Company, and wishes to provide Employee with certain compensation and benefits in return for his services;

Whereas, Employee wishes to be employed by the Company and to provide personal services to the Company in return for certain compensation and benefits;

Whereas, the Parties entered into an Employment Agreement dated December 11, 2007 (the "Prior Agreement") setting forth the terms of Employee's employment with the Company and now seek to supersede and replace the Prior Agreement with this Agreement; and

Now, Therefore, in consideration of the mutual promises and covenants contained herein, it is hereby agreed by and between the parties hereto as follows:

1. Employment by the Company.

1.1 Position. Subject to terms and conditions set forth herein, the Company agrees to employ Employee in the positions of General Counsel, Secretary and Vice President of Administration and Employee hereby accepts such employment. During the term of Employee's employment with the Company, Employee will devote Employee's best efforts and substantially all of Employee's business time and attention to the business of the Company.

1.2 Duties and Location. Employee shall perform such duties as are customarily associated with Employee's then current title. Employee's primary office location shall be a location mutually acceptable to both the Employee and the Company. The Company reserves the right to reasonably require Employee to perform Employee's duties at places other than Employee's primary office location from time to time as agreed to by Employee, and to require reasonable business travel.

1.3 Policies and Procedures. The employment relationship between the parties shall be governed by the general employment policies and practices of the Company, except that when the terms of this Agreement differ from or are in conflict with the Company's general employment policies or practices, this Agreement shall control.

2. Compensation.

2.1 Salary. For services to be rendered hereunder, Employee shall receive a bi-weekly salary of $11,131.17**,** approximately $289,410.00 on an annualized basis (the "Base Salary"), subject to standard payroll deductions and withholdings and payable in accordance with the Company's regular payroll schedule. Employee's Base Salary shall be reviewed annually and may be increased as approved by the Company's Board of Directors (the "Board") in its sole discretion.

2.2 Short Term Incentive. Employee shall be entitled to participate in the Company's Short Term Incentive plan ("STI") with a payout target of fifty percent (50%) of Employee's Base Salary. The structure of the STI from time to time, whether any STI payout will be awarded, and the amount of the STI awarded to Employee, shall be in the discretion of the Compensation Committee of the Board. Since the STI award is intended both to reward past Company and Employee performance and to provide an incentive for Employee to remain with the Company, Employee must remain an active employee through the date that any such STI award is paid in order to be entitled to receive any such award, except as otherwise provided in Section 5.2. Employee will not be paid any STI award (including a prorated award) if Employee's employment terminates for any reason before the STI is paid to him, except as otherwise provided in Section 5.2. Any earned STI shall be paid, if at all, not later than March 15th of the year following the calendar year as to which performance was measured.

2.3 Employee Benefits, Stock Options, And Incentive Compensation, And Other Compensation Plans And Programs. Employee shall be entitled to participate in such of the Company's benefit and deferred compensation plans and programs as may be made available to employees of the Company, including, without limitation, the Company's Long Term Incentive Plan, subject in each case to: (i) the generally applicable terms and conditions of the applicable plan or program and to the determinations of the Board or other person administering such plan or program, (ii) determinations by the Board or any such person as to whether and to what extent Employee shall so participate or cease to participate, and (iii) amendment, modification or termination of any such plan or program in the sole and absolute discretion of the Board. Notwithstanding the foregoing, Employee shall not be entitled to be paid any accrued but unused vacation pay that is not used in the ordinary course in accordance with the Company's vacation pay policy.

3. Confidential Information Obligations.

3.1 Confidential Information Agreement. As a condition of employment, Employee agrees to execute and abide by the Employee Confidential Information and Inventions Agreement attached hereto as Exhibit A.

3.2 Third Party Agreements and Information. Employee represents and warrants that Employee's employment by the Company will not conflict with any prior employment or consulting agreement or other agreement with any third party, and that Employee will perform Employee's duties to the Company without violating any such agreement. Employee represents and warrants that Employee does not possess confidential information arising out of prior employment, consulting, or other third party relationships, which would be used in connection with Employee's employment by the Company, except as expressly authorized by that third party. During Employee's employment by the Company, Employee will use in the performance of Employee's duties only information which is generally known and used by persons with training and experience comparable to Employee's own, common knowledge in the industry, otherwise legally in the public domain, or obtained or developed by the Company or by Employee in the course of Employee's work for the Company.

4. Outside Activities During Employment.

4.1 Non-Company Business. Except with the prior written consent of the Chief Executive Officer (in consultation with the General Counsel), Employee will not during the term of Employee's employment with the Company undertake or engage in any other employment, occupation or business enterprise, other than ones in which Employee is a passive investor. Employee may also engage in civic and not-for-profit activities so long as such activities do not materially interfere with the performance of Employee's duties hereunder.

4.2 No Adverse Interests. Employee agrees not to acquire, assume or participate in, directly or indirectly, any position, investment or interest known by him to be adverse or antagonistic to the Company, its business or prospects, financial or otherwise, except as a passive investor in mutual or exchange traded funds.

5. Termination Of Employment.

5.1 At-Will Relationship. Employee's employment relationship is at-will. Either Employee or the Company may terminate the employment relationship at any time, with or without Cause or advance notice.

5.2 Termination without Cause; Resignation for Good Reason. If, at any time, the Company terminates Employee's employment without Cause (as defined herein), or Employee resigns with Good Reason (as defined herein), and, within sixty (60) days after the Employee's Separation Date (as defined below), Employee executes and delivers the Separation Date Release of all claims set forth as Exhibit B hereto and allows such release to become effective without revoking same, then the Company will provide Employee with the following severance benefits (notwithstanding the foregoing, if any of the following severance benefits are subject to Section 409A (as defined below) and the sixty (60)-day period for executing the release and it becoming effective spans more than one calendar year, none of such severance benefits may be paid or delivered until the subsequent calendar year):

(a) Cash Severance.

(i) Qualifying Termination. Except as otherwise set forth in Section 5.2(a)(ii), in the event the Company terminates Employee's employment without Cause, or Employee resigns with Good Reason, other than in anticipation of, or on or within twenty-four (24) months after, a Change in Control (as defined below), the Company shall pay Employee severance in an amount equal to the sum of (A) twelve (12) months of Employee's Base Salary in effect on Employee's last day of employment (the "Separation Date"); and (B) 100% of the total target STI award contemplated by the Company's STI in effect on the Separation Date.

(ii) Change in Control. Notwithstanding Section 5.2(a)(i), in the event the Company terminates Employee's employment without Cause, or Employee resigns with Good Reason, in anticipation of, or on or within twenty-four (24) months after, a Change in Control, then the Company shall pay Employee severance in an amount equal to the sum of (C) twenty-four (24) months of Employee's Base Salary in effect on the Separation Date; and (D) 200% of the total target STI award contemplated by the Company's STI in effect on the Separation Date. For purposes of this Agreement, the Company will be deemed to have terminated Employee's employment, and Employee will be deemed to have resigned for Good Reason, in each case "in anticipation of" a Change in Control if Employee's employment terminates (i) prior to the Change in Control and (ii) during any period in which the Company has (A) initiated a transaction process or is engaged in substantive discussions with a third party about a specific transaction that, if consummated, would result in a Change in Control (and before the complete abandonment of such discussions without the transaction being consummated), or (B) become a party to a definitive agreement to consummate a transaction that would result in a Change in Control (and before the complete termination of such agreement without the transaction being consummated).

(iii) Payment. The cash severance shall be paid in a single lump sum as soon as administratively practicable after the effective date of the release of claims described in Section 5.2 (except as otherwise set forth above) but in no event later than the 15th day of the third month immediately following the end of the calendar year in which Employee's Separation Date occurs (subject to standard deductions and withholdings).

(b) Continued Health Insurance Coverage. To the extent provided by the federal COBRA law or, if applicable, state insurance laws, and by the Company's then-current group health insurance policies, Employee may be eligible to continue Employee's then-current group health insurance benefits after termination of Employment. If eligible and if Employee timely elects continued health insurance coverage, in the event the Company terminates Employee's employment without Cause, or Employee resigns with Good Reason, other than in anticipation of, or on or within twenty-four (24) months after, a Change in Control then the Company shall pay, on a monthly basis, the Company's portion of any premiums necessary to provide such coverage for a period of twelve (12) months after the Employee's Separation Date; **provided, however,** that no such premium payments shall be made following the effective date of Employee's coverage by a medical, dental or vision insurance plan of a subsequent employer. Employee shall notify the Company immediately if he becomes covered by a medical, dental or vision insurance plan of a subsequent employer. Notwithstanding the foregoing, in the event the Company terminates Employee's employment without Cause, or Employee resigns with Good Reason, in anticipation of, or within twenty-four (24) months on or after, a Change in Control, then (if eligible and coverage elected) the Company shall pay, on a monthly basis, the Company's portion of any premiums necessary to provide such coverage for a period of twenty-four (24) months after the Employee's Separation Date or, if earlier, until the termination of Employee's eligibility for such COBRA or, if applicable, state insurance laws, coverage; **provided, however,** that no such premium payments shall be made following the effective date of Employee's coverage by a medical, dental or vision insurance plan of a subsequent employer and Employee agrees to immediately notify the Company of any such coverage. In the event Employee is entitled to receive such coverage for a period of twenty-four (24) months after the Employee's Separation Date but Employee's right to such COBRA or, if applicable, state insurance laws, coverage expires in the ordinary course (and other than in connection with Employee's coverage by a medical, dental or vision insurance plan of a subsequent employer or as the result of any action or inaction of Employee, such as but not limited to Employee's failure to pay Employee's portion of the premiums), then, the Company shall pay, on a monthly basis, to Employee (subject to standard deductions and withholdings) a cash payment equal to the portion of the premiums the Company was paying prior to expiration of such coverage for each month after such coverage expires through twenty-four (24) months after the Employee's Separation Date, **provided, however,** that no such cash payments shall be made following the effective date of Employee's coverage by a medical, dental or vision insurance plan of a subsequent employer and Employee agrees to immediately notify the Company of any such coverage. Notwithstanding the foregoing, Employee's receipt of any amounts under this subsection are contingent upon the release of claims described in Section 5.2, so Employee may pay such amounts during this period and the Company will reimburse such amounts as soon as administratively practicable after the effective date of the release of claims described in Section 5.2 (except as otherwise set forth above) but in no event later than the 15th day of the third month immediately following the end of the calendar year in which Employee's Separation Date occurs.

(c) Accelerated Vesting. If Employee has been employed by the Company as of the Separation Date for one full year or longer, and the Company terminates Employee's employment without Cause, or Employee resigns with Good Reason, other than in anticipation of, or on or within twenty-four (24) months after, a Change in Control, then the Company will accelerate the vesting of any equity awards granted to Employee prior to Employee's Separation Date such that twenty-five percent (25%) of all shares or options subject to such awards which are unvested as of the Employee's Separation Date shall be accelerated and deemed fully vested as of the effective date of the release of claims described in Section 5.2 (except as otherwise set forth above); **provided, however**, that in the event, and without the requirement that Employee be employed for one full year or longer, the Company terminates Employee's employment without Cause, or Employee resigns with Good Reason, in anticipation of, or within twenty-four (24) months after, a Change in Control, then the Company will accelerate the vesting of any equity awards granted to Employee prior to Employee's employment termination such that one hundred percent (100%) of all shares or options subject to such awards which are unvested as of the Employee's Separation Date shall be accelerated and deemed fully vested as of the effective date of the release of claims described in Section 5.2 (except as otherwise set forth above).

5.3 Termination for Cause; Resignation Without Good Reason. If the Company terminates Employee's employment with the Company for Cause, or Employee resigns without Good Reason, then Employee will not be entitled to any further compensation from the Company (other than accrued salary through Employee's last day of employment which will be paid in the ordinary course and any vested benefits under the Company's benefit plans in which Employee participated prior to the Separation Date in accordance with the terms of such plans), including severance pay, pay in lieu of notice or any other such compensation.

5.4 Termination Due to Death or Disability.

(a) Death. This Agreement and Employee's employment shall terminate immediately upon Employee's death and Employee's estate shall not be entitled to any further compensation from the Company (other than accrued salary through Employee's last day of employment which will be paid in the ordinary course and any vested benefits under the Company's benefit plans in which Employee participated prior to the Separation Date in accordance with the terms of such), including severance pay, pay in lieu of notice or any other such compensation.

(b) Disability. If Employee is prevented from performing his duties as described in Section 1.1 of this Agreement by reason of any physical or mental incapacity, with or without reasonable accommodation, that results in Employee's satisfaction of all requirements necessary to receive benefits under the Company's long-term disability plan due to a total disability, then, to the extent permitted by law, the Company may terminate the employment of Employee and this Agreement at such time. In such an event, and if Employee or someone authorized to act on his behalf executes and delivers the Separation Date Release described in section 5.2 and allows such release to become effective, within the timeframe set forth above, then the Company shall pay Employee severance in a single lump sum equal to twelve (12) months of Employee's Base Salary in effect on Employee's Separation Date. This severance shall be paid on the Company's first regular payroll schedule (subject to standard deductions and withholdings) after the effective date of the release of claims (or as otherwise set forth above in connection with such release as described above) but in no event later than the 15th day of the third month immediately following the end of the calendar year in which Employee's Separation Date occurs. The severance benefits provided for in this Section 5.4 shall be reduced by any amounts expected to be paid to Employee in connection with any federal or state disability insurance payments or benefits, and any private insurance disability payments or benefits, to be provided to Employee within the twelve (12) months following Employee's Separation Date.

5.5 Deferred Compensation. Notwithstanding anything to the contrary set forth herein, any payments and benefits provided under this Agreement (the "Severance Benefits") that constitute "deferred compensation" within the meaning of Section 409A of the Internal Revenue Code of 1986, as amended (the "Code") and the regulations and other guidance thereunder and any state law of similar effect (collectively "Section 409A") shall not commence in connection with Employee's termination of employment unless and until Employee has also incurred a "separation from service" (as such term is defined in Treasury Regulation Section 1.409A-1(h) ("Separation From Service"), unless the Company reasonably determines that such amounts may be provided to Employee without causing Employee to incur the additional 20% tax under Section 409A.

It is intended that each installment of the Severance Benefits payments provided for in this Agreement is a separate "payment" for purposes of Treasury Regulation Section 1.409A-2(b)(2)(i). For the avoidance of doubt, it is intended that payments of the Severance Benefits set forth in this Agreement satisfy, to the greatest extent possible, the exemptions from the application of Section 409A provided under Treasury Regulation Sections 1.409A-1(b)(4), 1.409A-1(b)(5) and 1.409A-1(b)(9).

If Employee is a "specified employee" within the meaning of 409A(a)(2)(B)(i) of the Code, no Severance Benefit payments that are nonqualified deferred compensation subject to Section 409A and are triggered by a separation from service shall be paid until the later of six (6) months after Employee's Separation Date of, if earlier, Employee's death. All such payments will be accumulated and paid within thirty (30) days after the expiration of such delay period. However, it is intended that payments to Employee will be exempt from Section 409A under the "short-term deferral" rule set forth in Section 1.409A-1(b)(4) of the Treasury Regulations and not likely to be delayed pursuant to this provision.

Notwithstanding any other payment schedule set forth in this Agreement, none of the Severance Benefits will be paid or otherwise delivered prior to the effective date of the Separation Date Release of all claims set forth as Exhibit B hereto. All amounts payable under the Agreement will be subject to standard payroll taxes and deductions. Notwithstanding any other provision of this Agreement, the Company shall not be liable to Employee or any other person if payments under this Agreement fail to be exempt from, or compliant with, Section 409A. Employee is solely responsible for the tax consequences of any payments hereunder.

5.6 Limitation on Payments. In the event that the payments or other benefits provided for in this Agreement or otherwise payable to Employee (i) constitute "parachute payments" within the meaning of Section 280G of the Code, and (ii) would be subject to the excise tax imposed by Section 4999 of the Code (the "Excise Tax"), then Employee's benefits under this Agreement shall be either (a) delivered in full, or (b) delivered to such lesser extent which would result in no portion of such benefits being subject to the Excise Tax, whichever of the foregoing amounts, taking into account the applicable federal, state and local income taxes and the Excise Tax, results in the receipt by Employee on an after-tax basis, of the greatest amount of benefits, notwithstanding that all or some portion of such benefits may be taxable under Section 4999 of the Code. If a reduction in payments or benefits constituting "parachute payments" is necessary pursuant to the foregoing provision, reduction shall occur pro rata in the following order: reduction of cash payments; cancellation of accelerated vesting of stock awards; reduction of employee benefits. If acceleration of vesting of stock award compensation is to be reduced, such acceleration of vesting shall be cancelled in the reverse order of the date of grant of the Employee's stock awards.

5.7 No Mitigation. Employee shall not be required to mitigate damages or the amount of any payment provided for under this Agreement by seeking other employment or otherwise, nor shall the amount of any payment provided for under this Agreement be reduced by any compensation earned by Employee as the result of employment by another employer after the date of termination, or otherwise, except for health insurance benefits as set forth herein.

5.8 Definitions.

(a) For purposes of this Agreement, "**Cause**" shall mean any one or more of the following:

(i) Employee's indictment or conviction of any felony or of any crime involving dishonesty;

(ii) Employee's participation in any fraud or other act of willful misconduct against the Company (including any material breach of Company policy that causes or reasonably could cause harm to the Company);

(iii) Employee's refusal to comply with any lawful directive of the Company;

(iv) Employee's material breach of Employee's fiduciary, statutory, contractual, or common law duties to the Company (including any material breach of this Agreement or the Confidential Information and Inventions Agreement); or

(v) Conduct by Employee which in the good faith and reasonable determination of the Board demonstrates gross unfitness to serve.

Provided, however, that in the event that any of the foregoing events is reasonably capable of being cured, the Company shall, within twenty (20) days after the discovery of such event, provide written notice to the Employee describing the nature of such event and Employee shall thereafter have ten (10) business days to cure such event.

(b) For purposes of this Agreement, Employee shall have "**Good Reason"** for Employee's resignation if: (w) any of the following occurs without Employee's consent; (x) Employee notifies the Company in writing, within twenty (20) days after the occurrence of one of the following events that Employee intends to terminate his employment no earlier than thirty (30) days after providing such notice; (y) the Company does not cure such condition within thirty (30) days following its receipt of such notice or states unequivocally in writing that it does not intend to attempt to cure such condition, and (z) the Employee resigns from employment within thirty (30) days following the end of the period within which the Company was entitled to remedy the condition constituting Good Reason but failed to do so:

(i) the assignment to Employee of any duties or responsibilities which result in the material diminution of Employee's authority, duties or responsibility; **provided, however,** that the acquisition of the Company and subsequent conversion of the Company to a division or unit of the acquiring corporation will not by itself result in a material diminution of Employee's authority, duties or responsibility;

(ii) a material reduction by the Company in Employee's annual base salary, except to the extent the base salaries of all other executive officers of the Company are accordingly reduced;

(iii) a relocation of Employee's place of work, or the Company's principal executive offices if Employee's principal office is at such offices, to a location that increases Employee's daily one-way commute by more than thirty-five (35) miles; or

(iv) any material breach by the Company of any material provision of this Agreement, including but not limited to Section 7.7.

(c) For purposes of this Agreement, **"Change in Control"** shall be deemed to have occurred if, in a single transaction or series of related transactions: (i) any person (as such term is used in Section 13(d) and 14(d) of the Securities Exchange Act of 1934 ("Exchange Act")), or persons acting as a group, other than a trustee or fiduciary holding securities under an employment benefit program, is or becomes a "beneficial owner" (as defined in Rule 13-3 under the Exchange Act), directly or indirectly of securities of the Company representing a majority (*e.g.*, 50% plus one share) of the combined voting power of the Company, (ii) there is a merger, consolidation or other business combination transaction of the Company with or into another corporation, entity or person, other than a transaction in which the holders of at least a majority of the shares of voting capital stock of the Company outstanding immediately prior to such transaction continue to hold (either by such shares remaining outstanding or by their being converted into shares of voting capital stock of the surviving entity) a majority of the total voting power represented by the shares of voting capital stock of the Company (or the surviving entity) outstanding immediately after such transaction, or (iii) all or substantially all of the Company's assets are sold.

6. Arbitration.

To ensure the timely and economical resolution of disputes that may arise in connection with Employee's employment with the Company, Employee and the Company agree that any and all disputes, claims, or causes of action arising from or relating to the enforcement, breach, performance, negotiation, execution, or interpretation of this Agreement, Employee's employment, or the termination of Employee's employment, shall be resolved to the fullest extent permitted by law by final, binding and confidential arbitration, by a single arbitrator, in Sacramento, California, conducted by JAMS under the then applicable JAMS rules. **By agreeing to this arbitration procedure, both Employee and the Company waive the right to resolve any such dispute through a trial by jury or judge or administrative proceeding.** The arbitrator shall: (a) have the authority to compel adequate discovery for the resolution of the dispute and to award such relief as would otherwise be permitted by law; and (b) issue a written arbitration decision, to include the arbitrator's essential findings and conclusions and a statement of the award. The arbitrator shall be authorized to award any or all remedies that Employee or the Company would be entitled to seek in a court of law. The Company shall pay all JAMS' arbitration fees in excess of the amount of court fees that would be required if the dispute were decided in a court of law. Nothing in this Agreement is intended to prevent either Employee or the Company from obtaining injunctive relief in court to prevent irreparable harm pending the conclusion of any such arbitration.

7. General Provisions.

7.1 Notices. Any notices provided hereunder must be in writing and shall be deemed effective upon the earlier of personal delivery (including personal delivery by fax) or the next day after sending by overnight carrier, to the Company at its primary office location and to Employee at his address as listed on the Company payroll.

7.2 Severability. Whenever possible, each provision of this Agreement will be interpreted in such manner as to be effective and valid under applicable law, but if any provision of this Agreement is held to be invalid, illegal or unenforceable in any respect under any applicable law or rule in any jurisdiction, such invalidity, illegality or unenforceability will not affect any other provision or any other jurisdiction, but this Agreement will be reformed, construed and enforced in such jurisdiction to the extent possible in keeping with the intent of the parties.

7.3 Waiver. Any waiver of any breach of any provisions of this Agreement must be in writing to be effective, and it shall not thereby be deemed to have waived any preceding or succeeding breach of the same or any other provision of this Agreement.

7.4 Complete Agreement. This Agreement, including Exhibit A, constitutes the entire agreement between Employee and the Company and it is the complete, final, and exclusive embodiment of their agreement with regard to this subject matter. This Agreement supersedes and replaces the Prior Agreement in its entirety and the Prior Agreement shall have no further force or effect. It is entered into without reliance on any promise or representation other than those expressly contained herein, and it cannot be modified or amended except in a writing signed by the Employee and a duly authorized officer of the Company.

7.5 Counterparts. This Agreement may be executed in separate counterparts, any one of which need not contain signatures of more than one party, but all of which taken together will constitute one and the same Agreement.

7.6 Headings. The headings of the sections hereof are inserted for convenience only and shall not be deemed to constitute a part hereof nor to affect the meaning thereof.

7.7 Successors and Assigns. This Agreement is intended to bind and inure to the benefit of and be enforceable by Employee and the Company, and their respective successors, assigns, heirs, executors and administrators, except that Employee may not assign any of his duties hereunder and he may not assign any of his rights hereunder without the written consent of the Company, which shall not be withheld unreasonably. The Company shall obtain the assumption of this Agreement by any successor or assign of the Company.

7.8 Choice of Law. All questions concerning the construction, validity and interpretation of this Agreement will be governed by the law of the State of California.

In Witness Whereof, the parties have executed this Agreement.

Pacific Ethanol, Inc.

By: /s/ Neil M. Koehler
Neil M. Koehler
President and Chief Executive Officer

Date: November 7, 2016

Understood and Agreed:

Employee

/s/ Christopher W. Wright
Christopher W. Wright

Date: November 7, 2016

Exhibit A

EMPLOYEE CONFIDENTIAL INFORMATION AND INVENTIONS ASSIGNMENT AGREEMENT

In consideration of my employment or continued employment by Pacific Ethanol, Inc. ("**Company**"), and the compensation paid to me now and during my employment with the Company, I agree to the terms of this Agreement as follows:

1. Confidential Information Protections.

1.1 Nondisclosure; Recognition of Company's Rights. At all times during and after my employment, I will hold in confidence and will not disclose, use, lecture upon, or publish any of Company's Confidential Information (defined below), except as may be required in connection with my work for Company, or as expressly authorized by the Chief Executive Officer (the "**CEO**") of Company. I will obtain the CEO's written approval before publishing or submitting for publication any material (written, oral, or otherwise) that relates to my work at Company and/or incorporates any Confidential Information. I hereby assign to Company any rights I may have or acquire in any and all Confidential Information and recognize that all Confidential Information shall be the sole and exclusive property of Company and its assigns.

1.2 Confidential Information. The term "**Confidential Information**" shall mean any and all confidential knowledge, data or information related to Company's business or its actual or demonstrably anticipated research or development, including without limitation (a) trade secrets, inventions, ideas, processes, computer source and object code, data, formulae, programs, other works of authorship, know-how, improvements, discoveries, developments, designs, and techniques; (b) information regarding products, services, plans for research and development, marketing and business plans, budgets, financial statements, contracts, prices, suppliers, and customers; (c) information regarding the skills and compensation of Company's employees, contractors, and any other service providers of Company; and (d) the existence of any business discussions, negotiations, or agreements between Company and any third party.

1.3 Third Party Information. I understand that Company has received and in the future will receive from third parties confidential or proprietary information (**"Third Party Information"**) subject to a duty on Company's part to maintain the confidentiality of such information and to use it only for certain limited purposes. During and after the term of my employment, I will hold Third Party Information in strict confidence and will not disclose to anyone (other than Company personnel who need to know such information in connection with their work for Company) or use, Third Party Information, except in connection with my work for Company or unless expressly authorized by an officer of Company in writing.

1.4 No Improper Use of Information of Prior Employers and Others. I represent that my employment by Company does not and will not breach any agreement with any former employer, including any noncompete agreement or any agreement to keep in confidence or refrain from using information acquired by me prior to my employment by Company. I further represent that I have not entered into, and will not enter into, any agreement, either written or oral, in conflict with my obligations under this Agreement. During my employment by Company, I will not improperly make use of, or disclose, any information or trade secrets of any former employer or other third party, nor will I bring onto the premises of Company or use any unpublished documents or any property belonging to any former employer or other third party, in violation of any lawful agreements with that former employer or third party. I will use in the performance of my duties only information that is generally known and used by persons with training and experience comparable to my own, is common knowledge in the industry or otherwise legally in the public domain, or is otherwise provided or developed by Company.

2. Inventions.

2.1 Inventions and Intellectual Property Rights. As used in this Agreement, the term **"Invention"** means any ideas, concepts, information, materials, processes, data, programs, know-how, improvements, discoveries, developments, designs, artwork, formulae, other copyrightable works, and techniques and all Intellectual Property Rights in any of the items listed above. The term **"Intellectual Property Rights"** means all trade secrets, copyrights, trademarks, mask work rights, patents and other intellectual property rights recognized by the laws of any jurisdiction or country.

2.2 Prior Inventions. I have disclosed on **Exhibit A** a complete list of all Inventions that (a) I have, or I have caused to be, alone or jointly with others, conceived, developed, or reduced to practice prior to the commencement of my employment by Company; (b) in which I have an ownership interest or which I have a license to use; (c) and that I wish to have excluded from the scope of this Agreement (collectively referred to as "**Prior Inventions**"). If no Prior Inventions are listed in **Exhibit A**, I warrant that there are no Prior Inventions. I agree that I will not incorporate, or permit to be incorporated, Prior Inventions in any Company Inventions (defined below) without Company's prior written consent. If, in the course of my employment with Company, I incorporate a Prior Invention into a Company process, machine or other work, I hereby grant Company a non-exclusive, perpetual, fully-paid and royalty-free, irrevocable and worldwide license, with rights to sublicense through multiple levels of sublicensees, to reproduce, make derivative works of, distribute, publicly perform, and publicly display in any form or medium, whether now known or later developed, make, have made, use, sell, import, offer for sale, and exercise any and all present or future rights in, such Prior Invention.

2.3 Assignment of Company Inventions. Inventions assigned to the Company or to a third party as directed by the Company pursuant to the section titled "Government or Third Party" are referred to in this Agreement as "**Company Inventions**." Subject to the section titled "Government or Third Party" and except for Inventions that I can prove qualify fully under the provisions of California Labor Code section 2870 and I have set forth in **Exhibit A**, I hereby assign and agree to assign in the future (when any such Inventions or Intellectual Property Rights are first reduced to practice or first fixed in a tangible medium, as applicable) to Company all my right, title, and interest in and to any and all Inventions (and all Intellectual Property Rights with respect thereto) made, conceived, reduced to practice, or learned by me, either alone or with others, during the period of my employment by Company.

2.4 Obligation to Keep Company Informed. During the period of my employment and for one (1) year after my employment ends, I will promptly and fully disclose to Company in writing (a) all Inventions authored, conceived, or reduced to practice by me, either alone or with others, including any that might be covered under California Labor Code section 2870, and (b) all patent applications filed by me or in which I am named as an inventor or co-inventor.

2.5 Government or Third Party. I agree that, as directed by the Company, I will assign to a third party, including without limitation the United States, all my right, title, and interest in and to any particular Company Invention.

2.6 Enforcement of Intellectual Property Rights and Assistance. During and after the period of my employment, I will assist Company in every proper way to obtain and enforce United States and foreign Intellectual Property Rights relating to Company Inventions in all countries. If the Company is unable to secure my signature on any document needed in connection with such purposes, I hereby irrevocably designate and appoint Company and its duly authorized officers and agents as my agent and attorney in fact, which appointment is coupled with an interest, to act on my behalf to execute and file any such documents and to do all other lawfully permitted acts to further such purposes with the same legal force and effect as if executed by me.

2.7 Incorporation of Software Code. I agree that I will not incorporate into any Company software or otherwise deliver to Company any software code licensed under the GNU General Public License or Lesser General Public License or any other license that, by its terms, requires or conditions the use or distribution of such code on the disclosure, licensing, or distribution of any source code owned or licensed by Company.

3. Records. I agree to keep and maintain adequate and current records (in the form of notes, sketches, drawings and in any other form that is required by the Company) of all Inventions made by me during the period of my employment by the Company, which records shall be available to, and remain the sole property of, the Company at all times.

4. Additional Activities. I agree that (a) during the term of my employment by Company, I will not, without Company's express written consent, engage in any employment or business activity that is competitive with, or would otherwise conflict with my employment by, Company, and (b) for the period of my employment by Company and for one (l) year thereafter, I will not, either directly or indirectly, solicit or attempt to solicit any employee, independent contractor, or consultant of Company to terminate his, her or its relationship with Company in order to become an employee, consultant, or independent contractor to or for any other person or entity.

5. Return Of Company Property. Upon termination of my employment or upon Company's request at any other time, I will deliver to Company all of Company's property, equipment, and documents, together with all copies thereof, and any other material containing or disclosing any Inventions, Third Party Information or Confidential Information and certify in writing that I have fully complied with the foregoing obligation. I agree that I will not copy, delete, or alter any information contained upon my Company computer or Company equipment before I return it to Company. In addition, if I have used any personal computer, server, or e-mail system to receive, store, review, prepare or transmit any Company information, including but not limited to, Confidential Information, I agree to provide the Company with a computer-useable copy of all such Confidential Information and then permanently delete and expunge such Confidential Information from those systems; and I agree to provide the Company access to my system as reasonably requested to verify that the necessary copying and/or deletion is completed. I further agree that any property situated on Company's premises and owned by Company is subject to inspection by Company's personnel at any time with or without notice. Prior to the termination of my employment or promptly after termination of my employment, I will cooperate with Company in attending an exit interview and certify in writing that I have complied with the requirements of this section.

6. Notification Of New Employer. If I leave the employ of Company, I consent to the notification of my new employer of my rights and obligations under this Agreement, by Company providing a copy of this Agreement or otherwise.

7. General Provisions.

7.1 Governing Law and Venue. This Agreement and any action related thereto will be governed and interpreted by and under the laws of the State of California, without giving effect to any conflicts of laws principles that require the application of the law of a different state. I expressly consent to personal jurisdiction and venue in the state and federal courts for the county in which Company's principal place of business is located for any lawsuit filed there against me by Company arising from or related to this Agreement.

7.2 Severability. If any provision of this Agreement is, for any reason, held to be invalid or unenforceable, the other provisions of this Agreement will remain enforceable and the invalid or unenforceable provision will be deemed modified so that it is valid and enforceable to the maximum extent permitted by law.

7.3 Survival. This Agreement shall survive the termination of my employment and the assignment of this Agreement by Company to any successor or other assignee and be binding upon my heirs and legal representatives.

7.4 Employment. I agree and understand that nothing in this Agreement shall give me any right to continued employment by Company, and it will not interfere in any way with my right or Company's right to terminate my employment at any time, with or without cause and with or without advance notice.

7.5 Notices. Each party must deliver all notices or other communications required or permitted under this Agreement in writing to the other party at the address listed on the signature page, by courier, by certified or registered mail (postage prepaid and return receipt requested), or by a nationally-recognized express mail service. Notice will be effective upon receipt or refusal of delivery. If delivered by certified or registered mail, notice will be considered to have been given five (5) business days after it was mailed, as evidenced by the postmark. If delivered by courier or express mail service, notice will be considered to have been given on the delivery date reflected by the courier or express mail service receipt. Each party may change its address for receipt of notice by giving notice of the change to the other party.

7.6 Injunctive Relief. I acknowledge that, because my services are personal and unique and because I will have access to the Confidential Information of Company, any breach of this Agreement by me would cause irreparable injury to Company for which monetary damages would not be an adequate remedy and, therefore, will entitle Company to injunctive relief (including specific performance). The rights and remedies provided to each party in this Agreement are cumulative and in addition to any other rights and remedies available to such party at law or in equity.

7.7 Waiver. Any waiver or failure to enforce any provision of this Agreement on one occasion will not be deemed a waiver of that provision or any other provision on any other occasion.

7.8 Export. I agree not to export, directly or indirectly, any U.S. technical data acquired from Company or any products utilizing such data, to countries outside the United States, because such export could be in violation of the United States export laws or regulations.

7.9 Entire Agreement. If no other agreement governs nondisclosure and assignment of inventions during any period in which I was previously employed or am in the future employed by Company as an independent contractor, the obligations pursuant to sections of this Agreement titled "Confidential Information Protections" and "Inventions" shall apply. This Agreement is the final, complete and exclusive agreement of the parties with respect to the subject matter hereof and supersedes and merges all prior communications between us with respect to such matters. No modification of or amendment to this Agreement, or any waiver of any rights under this Agreement, will be effective unless in writing and signed by me and the CEO of Company. Any subsequent change or changes in my duties, salary or compensation will not affect the validity or scope of this Agreement.

This Agreement shall be effective as of the first day of my employment with Company.

EMPLOYEE:

I have read, understand, and Accept this agreement and have been given the opportunity to Review it with independent legal counsel.

_____
(Signature)

By: _____

Title: _____

Date: _____

Address: _____

COMPANY:

Accepted and agreed:

_____
(Signature)

By: _____

Title: _____

Date: _____

Address: _____

EXHIBIT A

INVENTIONS

1. Prior Inventions Disclosure. The following is a complete list of all Prior Inventions (as provided in Section 2.2 of the attached Employee Confidential Information and Inventions Assignment Agreement, defined herein as the "Agreement"):

[_] None

[_] See immediately below:

_____

_____

2. Limited Exclusion Notification.

This is to notify you in accordance with Section 2872 of the California Labor Code that the foregoing Agreement between you and Company does not require you to assign or offer to assign to Company any Invention that you develop entirely on your own time without using Company's equipment, supplies, facilities or trade secret information, except for those Inventions that either:

a . Relate at the time of conception or reduction to practice to Company's business, or actual or demonstrably anticipated research or development; or

b. Result from any work performed by you for Company.

To the extent a provision in the foregoing Agreement purports to require you to assign an Invention otherwise excluded from the preceding paragraph, the provision is against the public policy of this state and is unenforceable.

This limited exclusion does not apply to any patent or Invention covered by a contract between Company and the United States or any of its agencies requiring full title to such patent or Invention to be in the United States.

Exhibit B

Separation Date Release

(To be signed and become effective on or within 60 days after the employment termination date.)

In exchange for the severance benefits to be provided to me by Pacific Ethanol, Inc. (the "Company") pursuant to the terms of my Employment Agreement (the "Agreement"), I hereby provide the following General Release of Claims (the "Release"). I understand that, on the last date of my employment with the Company, the Company will pay me any accrued salary to which I am entitled by law, regardless of whether I sign this Release, but I am not entitled to any severance benefits unless I sign and return this Release to the Company and I allow it to become effective.

I hereby generally and completely release the Company and its directors, officers, employees, shareholders, partners, agents, attorneys, predecessors, successors, parent and subsidiary entities, insurers, affiliates, and assigns (collectively the "Released Parties") of and from any and all claims, liabilities and obligations, both known and unknown, arising out of or in any way related to events, acts, conduct, or omissions occurring at any time prior to or at the time that I sign this Release.

This general release includes, but is not limited to: (1) all claims arising out of or in any way related to my employment with the Company or the termination of that employment; (2) all claims related to my compensation or benefits from the Company, including salary, incentive awards, bonuses, commissions, vacation pay, expense reimbursements, severance pay, fringe benefits, stock, stock options, or any other ownership or equity interests in the Company; (3) all claims for breach of contract, wrongful termination, and breach of the implied covenant of good faith and fair dealing (including claims based on or arising under the Agreement); (4) all tort claims, including claims for fraud, defamation, emotional distress, and discharge in violation of public policy; and (5) all federal, state, and local statutory claims, including claims for discrimination, harassment, retaliation, attorneys' fees, or other claims arising under the federal Civil Rights Act of 1964 (as amended), the federal Americans with Disabilities Act of 1990, the federal Age Discrimination in Employment Act (as amended) ("ADEA"), the federal Family and Medical Leave Act, the California Labor Code (as amended), the California Family Rights Act, and the California Fair Employment and Housing Act (as amended).

I understand that notwithstanding the foregoing, the following are not included in the Released Claims (the "Excluded Claims"): (i) any rights or claims for indemnification I may have pursuant to any written indemnification agreement to which I am a party, the charter, bylaws, or operating agreements of any of the Released Parties, or under applicable law; or (ii) any rights which are not waivable as a matter of law. In addition, I understand that nothing in this release prevents me from filing, cooperating with, or participating in any proceeding before the Equal Employment Opportunity Commission, the Department of Labor, or the California Department of Fair Employment and Housing, except that I acknowledge and agree that I shall not recover any monetary benefits in connection with any such claim, charge or proceeding with regard to any claim released herein. I hereby represent and warrant that, other than the Excluded Claims, I am not aware of any claims I have or might have against any of the Released Parties that are not included in the Released Claims.

I acknowledge that I am knowingly and voluntarily waiving and releasing any rights I may have under the ADEA, and that the consideration given for the waiver and release in the preceding paragraph is in addition to anything of value to which I am already entitled. I further acknowledge that I have been advised by this writing that: (1) my waiver and release do not apply to any rights or claims that may arise after the date I sign this Release; (2) I should consult with an attorney prior to signing this Release (although I may choose voluntarily not to do so); (3) I have forty-five (45) days to consider this Release (although I may choose voluntarily to sign it earlier); (4) I have seven (7) days following the date I sign this Release to revoke it by providing written notice of revocation to the Company's Chief Executive Officer; and (5) this Release will not be effective until the date upon which the revocation period has expired, which will be the eighth calendar day after the date I sign it provided that I do not revoke it (the "Effective Date").

I UNDERSTAND THAT THIS AGREEMENT INCLUDES A RELEASE OF ALL KNOWN AND UNKNOWN CLAIMS. I acknowledge that I have read and understand Section 1542 of the California Civil Code which reads as follows: **"A general release does not extend to claims which the creditor does not know or suspect to exist in his or her favor at the time of executing the release, which if known by him or her must have materially affected his or her settlement with the debtor."** I hereby expressly waive and relinquish all rights and benefits under that section and any law or legal principle of similar effect in any jurisdiction with respect to my release of claims herein, including but not limited to the release of unknown and unsuspected claims.

I hereby represent that I have been paid all compensation owed and for all hours worked, I have received all the leave and leave benefits and protections for which I am eligible, pursuant to the Family and Medical Leave Act, the California Family Rights Act, or otherwise, and I have not suffered any on-the-job injury for which I have not already filed a workers' compensation claim.

I further agree: (1) not to disparage the Company, its parent, or its or their officers, directors, employees, shareholders, affiliates and agents, in any manner likely to be harmful to its or their business, business reputation, or personal reputation (although I may respond accurately and fully to any question, inquiry or request for information as required by legal process); (2) not to voluntarily (except in response to legal compulsion) assist any third party in bringing or pursuing any proposed or pending litigation, arbitration, administrative claim or other formal proceeding against the Company, its parent or subsidiary entities, affiliates, officers, directors, employees or agents; and (3) to reasonably cooperate with the Company, by voluntarily (without legal compulsion) providing accurate and complete information, in connection with the Company's actual or contemplated defense, prosecution, or investigation of any claims or demands by or against third parties, or other matters, arising from events, acts, or failures to act that occurred during the period of my employment by the Company.

By: _____
Date

Exhibit 10.9

Pacific Ethanol, Inc.

AMENDED AND RESTATED
EMPLOYMENT AGREEMENT
for
BRYON T. MCGREGOR

This Amended and Restated Employment Agreement ("Agreement") by and between Bryon T. McGregor ("Employee") and Pacific Ethanol, Inc. (the "Company") (collectively, the "Parties") is effective as of the last date signed by the Parties.

Whereas, the Company desires to employ Employee to provide personal services to the Company, and wishes to provide Employee with certain compensation and benefits in return for his services;

Whereas, Employee wishes to be employed by the Company and to provide personal services to the Company in return for certain compensation and benefits;

Whereas, the Parties entered into an Employment Agreement dated November 24, 2009 (the "Prior Agreement") setting forth the terms of Employee's employment with the Company and now seek to supersede and replace the Prior Agreement with this Agreement; and

Now, Therefore, in consideration of the mutual promises and covenants contained herein, it is hereby agreed by and between the parties hereto as follows:

1. Employment by the Company.

1.1 Position. Subject to terms and conditions set forth herein, the Company agrees to employ Employee in the position of Chief Financial Officer, Vice President and Assistant Secretary and Employee hereby accepts such employment. During the term of Employee's employment with the Company, Employee will devote Employee's best efforts and substantially all of Employee's business time and attention to the business of the Company.

1.2 Duties and Location. Employee shall perform such duties as are customarily associated with Employee's then current title. Employee's primary office location shall be a location mutually acceptable to both the Employee and the Company. The Company reserves the right to reasonably require Employee to perform Employee's duties at places other than Employee's primary office location from time to time as agreed to by Employee, and to require reasonable business travel.

1.3 Policies and Procedures. The employment relationship between the parties shall be governed by the general employment policies and practices of the Company, except that when the terms of this Agreement differ from or are in conflict with the Company's general employment policies or practices, this Agreement shall control.

2. Compensation.

2.1 Salary. For services to be rendered hereunder, Employee shall receive a bi-weekly salary of $11,527.32**,** approximately $299,710.00 on an annualized basis (the "Base Salary"), subject to standard payroll deductions and withholdings and payable in accordance with the Company's regular payroll schedule. Employee's Base Salary shall be reviewed annually and may be increased as approved by the Company's Board of Directors (the "Board") in its sole discretion.

2.2 Short Term Incentive. Employee shall be entitled to participate in the Company's Short Term Incentive plan ("STI") with a payout target of fifty percent (50%) of Employee's Base Salary. The structure of the STI from time to time, whether any STI payout will be awarded, and the amount of the STI awarded to Employee, shall be in the discretion of the Compensation Committee of the Board. Since the STI award is intended both to reward past Company and Employee performance and to provide an incentive for Employee to remain with the Company, Employee must remain an active employee through the date that any such STI award is paid in order to be entitled to receive any such award, except as otherwise provided in Section 5.2. Employee will not be paid any STI award (including a prorated award) if Employee's employment terminates for any reason before the STI is paid to him, except as otherwise provided in Section 5.2. Any earned STI shall be paid, if at all, not later than March 15th of the year following the calendar year as to which performance was measured.

2.3 Employee Benefits, Stock Options, And Incentive Compensation, And Other Compensation Plans And Programs. Employee shall be entitled to participate in such of the Company's benefit and deferred compensation plans and programs as may be made available to employees of the Company, including, without limitation, the Company's Long Term Incentive Plan, subject in each case to: (i) the generally applicable terms and conditions of the applicable plan or program and to the determinations of the Board or other person administering such plan or program, (ii) determinations by the Board or any such person as to whether and to what extent Employee shall so participate or cease to participate, and (iii) amendment, modification or termination of any such plan or program in the sole and absolute discretion of the Board. Notwithstanding the foregoing, Employee shall not be entitled to be paid any accrued but unused vacation pay that is not used in the ordinary course in accordance with the Company's vacation pay policy.

3. Confidential Information Obligations.

3.1 Confidential Information Agreement. As a condition of employment, Employee agrees to execute and abide by the Employee Confidential Information and Inventions Agreement attached hereto as Exhibit A.

3.2 Third Party Agreements and Information. Employee represents and warrants that Employee's employment by the Company will not conflict with any prior employment or consulting agreement or other agreement with any third party, and that Employee will perform Employee's duties to the Company without violating any such agreement. Employee represents and warrants that Employee does not possess confidential information arising out of prior employment, consulting, or other third party relationships, which would be used in connection with Employee's employment by the Company, except as expressly authorized by that third party. During Employee's employment by the Company, Employee will use in the performance of Employee's duties only information which is generally known and used by persons with training and experience comparable to Employee's own, common knowledge in the industry, otherwise legally in the public domain, or obtained or developed by the Company or by Employee in the course of Employee's work for the Company.

4. Outside Activities During Employment.

4.1 Non-Company Business. Except with the prior written consent of the Chief Executive Officer (in consultation with the General Counsel), Employee will not during the term of Employee's employment with the Company undertake or engage in any other employment, occupation or business enterprise, other than ones in which Employee is a passive investor. Employee may also engage in civic and not-for-profit activities so long as such activities do not materially interfere with the performance of Employee's duties hereunder.

4.2 No Adverse Interests. Employee agrees not to acquire, assume or participate in, directly or indirectly, any position, investment or interest known by him to be adverse or antagonistic to the Company, its business or prospects, financial or otherwise, except as a passive investor in mutual or exchange traded funds.

5. Termination Of Employment.

5.1 At-Will Relationship. Employee's employment relationship is at-will. Either Employee or the Company may terminate the employment relationship at any time, with or without Cause or advance notice.

5.2 Termination without Cause; Resignation for Good Reason. If, at any time, the Company terminates Employee's employment without Cause (as defined herein), or Employee resigns with Good Reason (as defined herein), and, within sixty (60) days after the Employee's Separation Date (as defined below), Employee executes and delivers the Separation Date Release of all claims set forth as Exhibit B hereto and allows such release to become effective without revoking same, then the Company will provide Employee with the following severance benefits (notwithstanding the foregoing, if any of the following severance benefits are subject to Section 409A (as defined below) and the sixty (60)-day period for executing the release and it becoming effective spans more than one calendar year, none of such severance benefits may be paid or delivered until the subsequent calendar year):

(a) Cash Severance.

(i) Qualifying Termination. Except as otherwise set forth in Section 5.2(a)(ii), in the event the Company terminates Employee's employment without Cause, or Employee resigns with Good Reason, other than in anticipation of, or on or within twenty-four (24) months after, a Change in Control (as defined below), the Company shall pay Employee severance in an amount equal to the sum of (A) twelve (12) months of Employee's Base Salary in effect on Employee's last day of employment (the "Separation Date"); and (B) 100% of the total target STI award contemplated by the Company's STI in effect on the Separation Date.

(ii) Change in Control. Notwithstanding Section 5.2(a)(i), in the event the Company terminates Employee's employment without Cause, or Employee resigns with Good Reason, in anticipation of, or on or within twenty-four (24) months after, a Change in Control, then the Company shall pay Employee severance in an amount equal to the sum of (C) twenty-four (24) months of Employee's Base Salary in effect on the Separation Date; and (D) 200% of the total target STI award contemplated by the Company's STI in effect on the Separation Date. For purposes of this Agreement, the Company will be deemed to have terminated Employee's employment, and Employee will be deemed to have resigned for Good Reason, in each case "in anticipation of" a Change in Control if Employee's employment terminates (i) prior to the Change in Control and (ii) during any period in which the Company has (A) initiated a transaction process or is engaged in substantive discussions with a third party about a specific transaction that, if consummated, would result in a Change in Control (and before the complete abandonment of such discussions without the transaction being consummated), or (B) become a party to a definitive agreement to consummate a transaction that would result in a Change in Control (and before the complete termination of such agreement without the transaction being consummated).

(iii) Payment. The cash severance shall be paid in a single lump sum as soon as administratively practicable after the effective date of the release of claims described in Section 5.2 (except as otherwise set forth above) but in no event later than the 15th day of the third month immediately following the end of the calendar year in which Employee's Separation Date occurs (subject to standard deductions and withholdings).

(b) Continued Health Insurance Coverage. To the extent provided by the federal COBRA law or, if applicable, state insurance laws, and by the Company's then-current group health insurance policies, Employee may be eligible to continue Employee's then-current group health insurance benefits after termination of Employment. If eligible and if Employee timely elects continued health insurance coverage, in the event the Company terminates Employee's employment without Cause, or Employee resigns with Good Reason, other than in anticipation of, or on or within twenty-four (24) months after, a Change in Control then the Company shall pay, on a monthly basis, the Company's portion of any premiums necessary to provide such coverage for a period of twelve (12) months after the Employee's Separation Date; **provided, however,** that no such premium payments shall be made following the effective date of Employee's coverage by a medical, dental or vision insurance plan of a subsequent employer. Employee shall notify the Company immediately if he becomes covered by a medical, dental or vision insurance plan of a subsequent employer. Notwithstanding the foregoing, in the event the Company terminates Employee's employment without Cause, or Employee resigns with Good Reason, in anticipation of, or within twenty-four (24) months on or after, a Change in Control, then (if eligible and coverage elected) the Company shall pay, on a monthly basis, the Company's portion of any premiums necessary to provide such coverage for a period of twenty-four (24) months after the Employee's Separation Date or, if earlier, until the termination of Employee's eligibility for such COBRA or, if applicable, state insurance laws, coverage; **provided, however,** that no such premium payments shall be made following the effective date of Employee's coverage by a medical, dental or vision insurance plan of a subsequent employer and Employee agrees to immediately notify the Company of any such coverage. In the event Employee is entitled to receive such coverage for a period of twenty-four (24) months after the Employee's Separation Date but Employee's right to such COBRA or, if applicable, state insurance laws, coverage expires in the ordinary course (and other than in connection with Employee's coverage by a medical, dental or vision insurance plan of a subsequent employer or as the result of any action or inaction of Employee, such as but not limited to Employee's failure to pay Employee's portion of the premiums), then, the Company shall pay, on a monthly basis, to Employee (subject to standard deductions and withholdings) a cash payment equal to the portion of the premiums the Company was paying prior to expiration of such coverage for each month after such coverage expires through twenty-four (24) months after the Employee's Separation Date, **provided, however,** that no such cash payments shall be made following the effective date of Employee's coverage by a medical, dental or vision insurance plan of a subsequent employer and Employee agrees to immediately notify the Company of any such coverage. Notwithstanding the foregoing, Employee's receipt of any amounts under this subsection are contingent upon the release of claims described in Section 5.2, so Employee may pay such amounts during this period and the Company will reimburse such amounts as soon as administratively practicable after the effective date of the release of claims described in Section 5.2 (except as otherwise set forth above) but in no event later than the 15th day of the third month immediately following the end of the calendar year in which Employee's Separation Date occurs.

(c) Accelerated Vesting. If Employee has been employed by the Company as of the Separation Date for one full year or longer, and the Company terminates Employee's employment without Cause, or Employee resigns with Good Reason, other than in anticipation of, or on or within twenty-four (24) months after, a Change in Control, then the Company will accelerate the vesting of any equity awards granted to Employee prior to Employee's Separation Date such that twenty-five percent (25%) of all shares or options subject to such awards which are unvested as of the Employee's Separation Date shall be accelerated and deemed fully vested as of the effective date of the release of claims described in Section 5.2 (except as otherwise set forth above); **provided, however**, that in the event, and without the requirement that Employee be employed for one full year or longer, the Company terminates Employee's employment without Cause, or Employee resigns with Good Reason, in anticipation of, or within twenty-four (24) months after, a Change in Control, then the Company will accelerate the vesting of any equity awards granted to Employee prior to Employee's employment termination such that one hundred percent (100%) of all shares or options subject to such awards which are unvested as of the Employee's Separation Date shall be accelerated and deemed fully vested as of the effective date of the release of claims described in Section 5.2 (except as otherwise set forth above).

5.3 Termination for Cause; Resignation Without Good Reason. If the Company terminates Employee's employment with the Company for Cause, or Employee resigns without Good Reason, then Employee will not be entitled to any further compensation from the Company (other than accrued salary through Employee's last day of employment which will be paid in the ordinary course and any vested benefits under the Company's benefit plans in which Employee participated prior to the Separation Date in accordance with the terms of such plans), including severance pay, pay in lieu of notice or any other such compensation.

5.4 Termination Due to Death or Disability.

(a) Death. This Agreement and Employee's employment shall terminate immediately upon Employee's death and Employee's estate shall not be entitled to any further compensation from the Company (other than accrued salary through Employee's last day of employment which will be paid in the ordinary course and any vested benefits under the Company's benefit plans in which Employee participated prior to the Separation Date in accordance with the terms of such), including severance pay, pay in lieu of notice or any other such compensation.

(b) Disability. If Employee is prevented from performing his duties as described in Section 1.1 of this Agreement by reason of any physical or mental incapacity, with or without reasonable accommodation, that results in Employee's satisfaction of all requirements necessary to receive benefits under the Company's long-term disability plan due to a total disability, then, to the extent permitted by law, the Company may terminate the employment of Employee and this Agreement at such time. In such an event, and if Employee or someone authorized to act on his behalf executes and delivers the Separation Date Release described in section 5.2 and allows such release to become effective, within the timeframe set forth above, then the Company shall pay Employee severance in a single lump sum equal to twelve (12) months of Employee's Base Salary in effect on Employee's Separation Date. This severance shall be paid on the Company's first regular payroll schedule (subject to standard deductions and withholdings) after the effective date of the release of claims (or as otherwise set forth above in connection with such release as described above) but in no event later than the 15th day of the third month immediately following the end of the calendar year in which Employee's Separation Date occurs. The severance benefits provided for in this Section 5.4 shall be reduced by any amounts expected to be paid to Employee in connection with any federal or state disability insurance payments or benefits, and any private insurance disability payments or benefits, to be provided to Employee within the twelve (12) months following Employee's Separation Date.

5.5 Deferred Compensation. Notwithstanding anything to the contrary set forth herein, any payments and benefits provided under this Agreement (the "Severance Benefits") that constitute "deferred compensation" within the meaning of Section 409A of the Internal Revenue Code of 1986, as amended (the "Code") and the regulations and other guidance thereunder and any state law of similar effect (collectively "Section 409A") shall not commence in connection with Employee's termination of employment unless and until Employee has also incurred a "separation from service" (as such term is defined in Treasury Regulation Section 1.409A-1(h) ("Separation From Service"), unless the Company reasonably determines that such amounts may be provided to Employee without causing Employee to incur the additional 20% tax under Section 409A.

It is intended that each installment of the Severance Benefits payments provided for in this Agreement is a separate "payment" for purposes of Treasury Regulation Section 1.409A-2(b)(2)(i). For the avoidance of doubt, it is intended that payments of the Severance Benefits set forth in this Agreement satisfy, to the greatest extent possible, the exemptions from the application of Section 409A provided under Treasury Regulation Sections 1.409A-1(b)(4), 1.409A-1(b)(5) and 1.409A-1(b)(9).

If Employee is a "specified employee" within the meaning of 409A(a)(2)(B)(i) of the Code, no Severance Benefit payments that are nonqualified deferred compensation subject to Section 409A and are triggered by a separation from service shall be paid until the later of six (6) months after Employee's Separation Date of, if earlier, Employee's death. All such payments will be accumulated and paid within thirty (30) days after the expiration of such delay period. However, it is intended that payments to Employee will be exempt from Section 409A under the "short-term deferral" rule set forth in Section 1.409A-1(b)(4) of the Treasury Regulations and not likely to be delayed pursuant to this provision.

Notwithstanding any other payment schedule set forth in this Agreement, none of the Severance Benefits will be paid or otherwise delivered prior to the effective date of the Separation Date Release of all claims set forth as Exhibit B hereto. All amounts payable under the Agreement will be subject to standard payroll taxes and deductions. Notwithstanding any other provision of this Agreement, the Company shall not be liable to Employee or any other person if payments under this Agreement fail to be exempt from, or compliant with, Section 409A. Employee is solely responsible for the tax consequences of any payments hereunder.

5.6 Limitation on Payments. In the event that the payments or other benefits provided for in this Agreement or otherwise payable to Employee (i) constitute "parachute payments" within the meaning of Section 280G of the Code, and (ii) would be subject to the excise tax imposed by Section 4999 of the Code (the "Excise Tax"), then Employee's benefits under this Agreement shall be either (a) delivered in full, or (b) delivered to such lesser extent which would result in no portion of such benefits being subject to the Excise Tax, whichever of the foregoing amounts, taking into account the applicable federal, state and local income taxes and the Excise Tax, results in the receipt by Employee on an after-tax basis, of the greatest amount of benefits, notwithstanding that all or some portion of such benefits may be taxable under Section 4999 of the Code. If a reduction in payments or benefits constituting "parachute payments" is necessary pursuant to the foregoing provision, reduction shall occur pro rata in the following order: reduction of cash payments; cancellation of accelerated vesting of stock awards; reduction of employee benefits. If acceleration of vesting of stock award compensation is to be reduced, such acceleration of vesting shall be cancelled in the reverse order of the date of grant of the Employee's stock awards.

5.7 No Mitigation. Employee shall not be required to mitigate damages or the amount of any payment provided for under this Agreement by seeking other employment or otherwise, nor shall the amount of any payment provided for under this Agreement be reduced by any compensation earned by Employee as the result of employment by another employer after the date of termination, or otherwise, except for health insurance benefits as set forth herein.

5.8 Definitions.

(a) For purposes of this Agreement, "**Cause**" shall mean any one or more of the following:

(i) Employee's indictment or conviction of any felony or of any crime involving dishonesty;

(ii) Employee's participation in any fraud or other act of willful misconduct against the Company (including any material breach of Company policy that causes or reasonably could cause harm to the Company);

(iii) Employee's refusal to comply with any lawful directive of the Company;

(iv) Employee's material breach of Employee's fiduciary, statutory, contractual, or common law duties to the Company (including any material breach of this Agreement or the Confidential Information and Inventions Agreement); or

(v) Conduct by Employee which in the good faith and reasonable determination of the Board demonstrates gross unfitness to serve.

Provided, however, that in the event that any of the foregoing events is reasonably capable of being cured, the Company shall, within twenty (20) days after the discovery of such event, provide written notice to the Employee describing the nature of such event and Employee shall thereafter have ten (10) business days to cure such event.

(b) For purposes of this Agreement, Employee shall have "**Good Reason"** for Employee's resignation if: (w) any of the following occurs without Employee's consent; (x) Employee notifies the Company in writing, within twenty (20) days after the occurrence of one of the following events that Employee intends to terminate his employment no earlier than thirty (30) days after providing such notice; (y) the Company does not cure such condition within thirty (30) days following its receipt of such notice or states unequivocally in writing that it does not intend to attempt to cure such condition, and (z) the Employee resigns from employment within thirty (30) days following the end of the period within which the Company was entitled to remedy the condition constituting Good Reason but failed to do so:

(i) the assignment to Employee of any duties or responsibilities which result in the material diminution of Employee's authority, duties or responsibility; **provided, however,** that the acquisition of the Company and subsequent conversion of the Company to a division or unit of the acquiring corporation will not by itself result in a material diminution of Employee's authority, duties or responsibility;

(ii) a material reduction by the Company in Employee's annual base salary, except to the extent the base salaries of all other executive officers of the Company are accordingly reduced;

(iii) a relocation of Employee's place of work, or the Company's principal executive offices if Employee's principal office is at such offices, to a location that increases Employee's daily one-way commute by more than thirty-five (35) miles; or

(iv) any material breach by the Company of any material provision of this Agreement, including but not limited to Section 7.7.

(c) For purposes of this Agreement, **"Change in Control"** shall be deemed to have occurred if, in a single transaction or series of related transactions: (i) any person (as such term is used in Section 13(d) and 14(d) of the Securities Exchange Act of 1934 ("Exchange Act")), or persons acting as a group, other than a trustee or fiduciary holding securities under an employment benefit program, is or becomes a "beneficial owner" (as defined in Rule 13-3 under the Exchange Act), directly or indirectly of securities of the Company representing a majority (*e.g.*, 50% plus one share) of the combined voting power of the Company, (ii) there is a merger, consolidation or other business combination transaction of the Company with or into another corporation, entity or person, other than a transaction in which the holders of at least a majority of the shares of voting capital stock of the Company outstanding immediately prior to such transaction continue to hold (either by such shares remaining outstanding or by their being converted into shares of voting capital stock of the surviving entity) a majority of the total voting power represented by the shares of voting capital stock of the Company (or the surviving entity) outstanding immediately after such transaction, or (iii) all or substantially all of the Company's assets are sold.

6. Arbitration.

To ensure the timely and economical resolution of disputes that may arise in connection with Employee's employment with the Company, Employee and the Company agree that any and all disputes, claims, or causes of action arising from or relating to the enforcement, breach, performance, negotiation, execution, or interpretation of this Agreement, Employee's employment, or the termination of Employee's employment, shall be resolved to the fullest extent permitted by law by final, binding and confidential arbitration, by a single arbitrator, in Sacramento, California, conducted by JAMS under the then applicable JAMS rules. **By agreeing to this arbitration procedure, both Employee and the Company waive the right to resolve any such dispute through a trial by jury or judge or administrative proceeding.** The arbitrator shall: (a) have the authority to compel adequate discovery for the resolution of the dispute and to award such relief as would otherwise be permitted by law; and (b) issue a written arbitration decision, to include the arbitrator's essential findings and conclusions and a statement of the award. The arbitrator shall be authorized to award any or all remedies that Employee or the Company would be entitled to seek in a court of law. The Company shall pay all JAMS' arbitration fees in excess of the amount of court fees that would be required if the dispute were decided in a court of law. Nothing in this Agreement is intended to prevent either Employee or the Company from obtaining injunctive relief in court to prevent irreparable harm pending the conclusion of any such arbitration.

7. General Provisions.

7.1 Notices. Any notices provided hereunder must be in writing and shall be deemed effective upon the earlier of personal delivery (including personal delivery by fax) or the next day after sending by overnight carrier, to the Company at its primary office location and to Employee at his address as listed on the Company payroll.

7.2 Severability. Whenever possible, each provision of this Agreement will be interpreted in such manner as to be effective and valid under applicable law, but if any provision of this Agreement is held to be invalid, illegal or unenforceable in any respect under any applicable law or rule in any jurisdiction, such invalidity, illegality or unenforceability will not affect any other provision or any other jurisdiction, but this Agreement will be reformed, construed and enforced in such jurisdiction to the extent possible in keeping with the intent of the parties.

7.3 Waiver. Any waiver of any breach of any provisions of this Agreement must be in writing to be effective, and it shall not thereby be deemed to have waived any preceding or succeeding breach of the same or any other provision of this Agreement.

7.4 Complete Agreement. This Agreement, including Exhibit A, constitutes the entire agreement between Employee and the Company and it is the complete, final, and exclusive embodiment of their agreement with regard to this subject matter. This Agreement supersedes and replaces the Prior Agreement in its entirety and the Prior Agreement shall have no further force or effect. It is entered into without reliance on any promise or representation other than those expressly contained herein, and it cannot be modified or amended except in a writing signed by the Employee and a duly authorized officer of the Company.

7.5 Counterparts. This Agreement may be executed in separate counterparts, any one of which need not contain signatures of more than one party, but all of which taken together will constitute one and the same Agreement.

7.6 Headings. The headings of the sections hereof are inserted for convenience only and shall not be deemed to constitute a part hereof nor to affect the meaning thereof.

7.7 Successors and Assigns. This Agreement is intended to bind and inure to the benefit of and be enforceable by Employee and the Company, and their respective successors, assigns, heirs, executors and administrators, except that Employee may not assign any of his duties hereunder and he may not assign any of his rights hereunder without the written consent of the Company, which shall not be withheld unreasonably. The Company shall obtain the assumption of this Agreement by any successor or assign of the Company.

7.8 Choice of Law. All questions concerning the construction, validity and interpretation of this Agreement will be governed by the law of the State of California.

In Witness Whereof, the parties have executed this Agreement.

Pacific Ethanol, Inc.

By: /s/ Neil M. Koehler
Neil M. Koehler
President and Chief Executive Officer

Date: November 7, 2016

Understood and Agreed:

Employee

/s/ Bryon T. McGregor
Bryon T. McGregor

Date: November 7, 2016

Exhibit A

EMPLOYEE CONFIDENTIAL INFORMATION AND INVENTIONS ASSIGNMENT AGREEMENT

In consideration of my employment or continued employment by Pacific Ethanol, Inc. ("**Company**"), and the compensation paid to me now and during my employment with the Company, I agree to the terms of this Agreement as follows:

1. Confidential Information Protections.

1.1 Nondisclosure; Recognition of Company's Rights. At all times during and after my employment, I will hold in confidence and will not disclose, use, lecture upon, or publish any of Company's Confidential Information (defined below), except as may be required in connection with my work for Company, or as expressly authorized by the Chief Executive Officer (the "**CEO**") of Company. I will obtain the CEO's written approval before publishing or submitting for publication any material (written, oral, or otherwise) that relates to my work at Company and/or incorporates any Confidential Information. I hereby assign to Company any rights I may have or acquire in any and all Confidential Information and recognize that all Confidential Information shall be the sole and exclusive property of Company and its assigns.

1.2 Confidential Information. The term "**Confidential Information**" shall mean any and all confidential knowledge, data or information related to Company's business or its actual or demonstrably anticipated research or development, including without limitation (a) trade secrets, inventions, ideas, processes, computer source and object code, data, formulae, programs, other works of authorship, know-how, improvements, discoveries, developments, designs, and techniques; (b) information regarding products, services, plans for research and development, marketing and business plans, budgets, financial statements, contracts, prices, suppliers, and customers; (c) information regarding the skills and compensation of Company's employees, contractors, and any other service providers of Company; and (d) the existence of any business discussions, negotiations, or agreements between Company and any third party.

1.3 Third Party Information. I understand that Company has received and in the future will receive from third parties confidential or proprietary information (**"Third Party Information"**) subject to a duty on Company's part to maintain the confidentiality of such information and to use it only for certain limited purposes. During and after the term of my employment, I will hold Third Party Information in strict confidence and will not disclose to anyone (other than Company personnel who need to know such information in connection with their work for Company) or use, Third Party Information, except in connection with my work for Company or unless expressly authorized by an officer of Company in writing.

1.4 No Improper Use of Information of Prior Employers and Others. I represent that my employment by Company does not and will not breach any agreement with any former employer, including any noncompete agreement or any agreement to keep in confidence or refrain from using information acquired by me prior to my employment by Company. I further represent that I have not entered into, and will not enter into, any agreement, either written or oral, in conflict with my obligations under this Agreement. During my employment by Company, I will not improperly make use of, or disclose, any information or trade secrets of any former employer or other third party, nor will I bring onto the premises of Company or use any unpublished documents or any property belonging to any former employer or other third party, in violation of any lawful agreements with that former employer or third party. I will use in the performance of my duties only information that is generally known and used by persons with training and experience comparable to my own, is common knowledge in the industry or otherwise legally in the public domain, or is otherwise provided or developed by Company.

2. Inventions.

2.1 Inventions and Intellectual Property Rights. As used in this Agreement, the term **"Invention"** means any ideas, concepts, information, materials, processes, data, programs, know-how, improvements, discoveries, developments, designs, artwork, formulae, other copyrightable works, and techniques and all Intellectual Property Rights in any of the items listed above. The term **"Intellectual Property Rights"** means all trade secrets, copyrights, trademarks, mask work rights, patents and other intellectual property rights recognized by the laws of any jurisdiction or country.

2.2 Prior Inventions. I have disclosed on **Exhibit A** a complete list of all Inventions that (a) I have, or I have caused to be, alone or jointly with others, conceived, developed, or reduced to practice prior to the commencement of my employment by Company; (b) in which I have an ownership interest or which I have a license to use; (c) and that I wish to have excluded from the scope of this Agreement (collectively referred to as "**Prior Inventions**"). If no Prior Inventions are listed in **Exhibit A**, I warrant that there are no Prior Inventions. I agree that I will not incorporate, or permit to be incorporated, Prior Inventions in any Company Inventions (defined below) without Company's prior written consent. If, in the course of my employment with Company, I incorporate a Prior Invention into a Company process, machine or other work, I hereby grant Company a non-exclusive, perpetual, fully-paid and royalty-free, irrevocable and worldwide license, with rights to sublicense through multiple levels of sublicensees, to reproduce, make derivative works of, distribute, publicly perform, and publicly display in any form or medium, whether now known or later developed, make, have made, use, sell, import, offer for sale, and exercise any and all present or future rights in, such Prior Invention.

2.3 Assignment of Company Inventions. Inventions assigned to the Company or to a third party as directed by the Company pursuant to the section titled "Government or Third Party" are referred to in this Agreement as "**Company Inventions**." Subject to the section titled "Government or Third Party" and except for Inventions that I can prove qualify fully under the provisions of California Labor Code section 2870 and I have set forth in **Exhibit A**, I hereby assign and agree to assign in the future (when any such Inventions or Intellectual Property Rights are first reduced to practice or first fixed in a tangible medium, as applicable) to Company all my right, title, and interest in and to any and all Inventions (and all Intellectual Property Rights with respect thereto) made, conceived, reduced to practice, or learned by me, either alone or with others, during the period of my employment by Company.

2.4 Obligation to Keep Company Informed. During the period of my employment and for one (1) year after my employment ends, I will promptly and fully disclose to Company in writing (a) all Inventions authored, conceived, or reduced to practice by me, either alone or with others, including any that might be covered under California Labor Code section 2870, and (b) all patent applications filed by me or in which I am named as an inventor or co-inventor.

2.5 Government or Third Party. I agree that, as directed by the Company, I will assign to a third party, including without limitation the United States, all my right, title, and interest in and to any particular Company Invention.

2.6 Enforcement of Intellectual Property Rights and Assistance. During and after the period of my employment, I will assist Company in every proper way to obtain and enforce United States and foreign Intellectual Property Rights relating to Company Inventions in all countries. If the Company is unable to secure my signature on any document needed in connection with such purposes, I hereby irrevocably designate and appoint Company and its duly authorized officers and agents as my agent and attorney in fact, which appointment is coupled with an interest, to act on my behalf to execute and file any such documents and to do all other lawfully permitted acts to further such purposes with the same legal force and effect as if executed by me.

2.7 Incorporation of Software Code. I agree that I will not incorporate into any Company software or otherwise deliver to Company any software code licensed under the GNU General Public License or Lesser General Public License or any other license that, by its terms, requires or conditions the use or distribution of such code on the disclosure, licensing, or distribution of any source code owned or licensed by Company.

3. Records. I agree to keep and maintain adequate and current records (in the form of notes, sketches, drawings and in any other form that is required by the Company) of all Inventions made by me during the period of my employment by the Company, which records shall be available to, and remain the sole property of, the Company at all times.

4. Additional Activities. I agree that (a) during the term of my employment by Company, I will not, without Company's express written consent, engage in any employment or business activity that is competitive with, or would otherwise conflict with my employment by, Company, and (b) for the period of my employment by Company and for one (l) year thereafter, I will not, either directly or indirectly, solicit or attempt to solicit any employee, independent contractor, or consultant of Company to terminate his, her or its relationship with Company in order to become an employee, consultant, or independent contractor to or for any other person or entity.

5. Return Of Company Property. Upon termination of my employment or upon Company's request at any other time, I will deliver to Company all of Company's property, equipment, and documents, together with all copies thereof, and any other material containing or disclosing any Inventions, Third Party Information or Confidential Information and certify in writing that I have fully complied with the foregoing obligation. I agree that I will not copy, delete, or alter any information contained upon my Company computer or Company equipment before I return it to Company. In addition, if I have used any personal computer, server, or e-mail system to receive, store, review, prepare or transmit any Company information, including but not limited to, Confidential Information, I agree to provide the Company with a computer-useable copy of all such Confidential Information and then permanently delete and expunge such Confidential Information from those systems; and I agree to provide the Company access to my system as reasonably requested to verify that the necessary copying and/or deletion is completed. I further agree that any property situated on Company's premises and owned by Company is subject to inspection by Company's personnel at any time with or without notice. Prior to the termination of my employment or promptly after termination of my employment, I will cooperate with Company in attending an exit interview and certify in writing that I have complied with the requirements of this section.

6. Notification Of New Employer. If I leave the employ of Company, I consent to the notification of my new employer of my rights and obligations under this Agreement, by Company providing a copy of this Agreement or otherwise.

7. General Provisions.

7.1 Governing Law and Venue. This Agreement and any action related thereto will be governed and interpreted by and under the laws of the State of California, without giving effect to any conflicts of laws principles that require the application of the law of a different state. I expressly consent to personal jurisdiction and venue in the state and federal courts for the county in which Company's principal place of business is located for any lawsuit filed there against me by Company arising from or related to this Agreement.

7.2 Severability. If any provision of this Agreement is, for any reason, held to be invalid or unenforceable, the other provisions of this Agreement will remain enforceable and the invalid or unenforceable provision will be deemed modified so that it is valid and enforceable to the maximum extent permitted by law.

7.3 Survival. This Agreement shall survive the termination of my employment and the assignment of this Agreement by Company to any successor or other assignee and be binding upon my heirs and legal representatives.

7.4 Employment. I agree and understand that nothing in this Agreement shall give me any right to continued employment by Company, and it will not interfere in any way with my right or Company's right to terminate my employment at any time, with or without cause and with or without advance notice.

7.5 Notices. Each party must deliver all notices or other communications required or permitted under this Agreement in writing to the other party at the address listed on the signature page, by courier, by certified or registered mail (postage prepaid and return receipt requested), or by a nationally-recognized express mail service. Notice will be effective upon receipt or refusal of delivery. If delivered by certified or registered mail, notice will be considered to have been given five (5) business days after it was mailed, as evidenced by the postmark. If delivered by courier or express mail service, notice will be considered to have been given on the delivery date reflected by the courier or express mail service receipt. Each party may change its address for receipt of notice by giving notice of the change to the other party.

7.6 Injunctive Relief. I acknowledge that, because my services are personal and unique and because I will have access to the Confidential Information of Company, any breach of this Agreement by me would cause irreparable injury to Company for which monetary damages would not be an adequate remedy and, therefore, will entitle Company to injunctive relief (including specific performance). The rights and remedies provided to each party in this Agreement are cumulative and in addition to any other rights and remedies available to such party at law or in equity.

7.7 Waiver. Any waiver or failure to enforce any provision of this Agreement on one occasion will not be deemed a waiver of that provision or any other provision on any other occasion.

7.8 Export. I agree not to export, directly or indirectly, any U.S. technical data acquired from Company or any products utilizing such data, to countries outside the United States, because such export could be in violation of the United States export laws or regulations.

7.9 Entire Agreement. If no other agreement governs nondisclosure and assignment of inventions during any period in which I was previously employed or am in the future employed by Company as an independent contractor, the obligations pursuant to sections of this Agreement titled "Confidential Information Protections" and "Inventions" shall apply. This Agreement is the final, complete and exclusive agreement of the parties with respect to the subject matter hereof and supersedes and merges all prior communications between us with respect to such matters. No modification of or amendment to this Agreement, or any waiver of any rights under this Agreement, will be effective unless in writing and signed by me and the CEO of Company. Any subsequent change or changes in my duties, salary or compensation will not affect the validity or scope of this Agreement.

This Agreement shall be effective as of the first day of my employment with Company.

EMPLOYEE:

I have read, understand, and Accept this agreement and have been given the opportunity to Review it with independent legal counsel.

_____
(Signature)

By: _____

Title: _____

Date: _____

Address: _____

COMPANY:

Accepted and agreed:

_____
(Signature)

By: _____

Title: _____

Date: _____

Address: _____

EXHIBIT A

INVENTIONS

1. Prior Inventions Disclosure. The following is a complete list of all Prior Inventions (as provided in Section 2.2 of the attached Employee Confidential Information and Inventions Assignment Agreement, defined herein as the "Agreement"):

[_] None

[_] See immediately below:

_____

_____

2. Limited Exclusion Notification.

This is to notify you in accordance with Section 2872 of the California Labor Code that the foregoing Agreement between you and Company does not require you to assign or offer to assign to Company any Invention that you develop entirely on your own time without using Company's equipment, supplies, facilities or trade secret information, except for those Inventions that either:

a . Relate at the time of conception or reduction to practice to Company's business, or actual or demonstrably anticipated research or development; or

b. Result from any work performed by you for Company.

To the extent a provision in the foregoing Agreement purports to require you to assign an Invention otherwise excluded from the preceding paragraph, the provision is against the public policy of this state and is unenforceable.

This limited exclusion does not apply to any patent or Invention covered by a contract between Company and the United States or any of its agencies requiring full title to such patent or Invention to be in the United States.

Exhibit B

Separation Date Release

(To be signed and become effective on or within 60 days after the employment termination date.)

In exchange for the severance benefits to be provided to me by Pacific Ethanol, Inc. (the "Company") pursuant to the terms of my Employment Agreement (the "Agreement"), I hereby provide the following General Release of Claims (the "Release"). I understand that, on the last date of my employment with the Company, the Company will pay me any accrued salary to which I am entitled by law, regardless of whether I sign this Release, but I am not entitled to any severance benefits unless I sign and return this Release to the Company and I allow it to become effective.

I hereby generally and completely release the Company and its directors, officers, employees, shareholders, partners, agents, attorneys, predecessors, successors, parent and subsidiary entities, insurers, affiliates, and assigns (collectively the "Released Parties") of and from any and all claims, liabilities and obligations, both known and unknown, arising out of or in any way related to events, acts, conduct, or omissions occurring at any time prior to or at the time that I sign this Release.

This general release includes, but is not limited to: (1) all claims arising out of or in any way related to my employment with the Company or the termination of that employment; (2) all claims related to my compensation or benefits from the Company, including salary, incentive awards, bonuses, commissions, vacation pay, expense reimbursements, severance pay, fringe benefits, stock, stock options, or any other ownership or equity interests in the Company; (3) all claims for breach of contract, wrongful termination, and breach of the implied covenant of good faith and fair dealing (including claims based on or arising under the Agreement); (4) all tort claims, including claims for fraud, defamation, emotional distress, and discharge in violation of public policy; and (5) all federal, state, and local statutory claims, including claims for discrimination, harassment, retaliation, attorneys' fees, or other claims arising under the federal Civil Rights Act of 1964 (as amended), the federal Americans with Disabilities Act of 1990, the federal Age Discrimination in Employment Act (as amended) ("ADEA"), the federal Family and Medical Leave Act, the California Labor Code (as amended), the California Family Rights Act, and the California Fair Employment and Housing Act (as amended).

I understand that notwithstanding the foregoing, the following are not included in the Released Claims (the "Excluded Claims"): (i) any rights or claims for indemnification I may have pursuant to any written indemnification agreement to which I am a party, the charter, bylaws, or operating agreements of any of the Released Parties, or under applicable law; or (ii) any rights which are not waivable as a matter of law. In addition, I understand that nothing in this release prevents me from filing, cooperating with, or participating in any proceeding before the Equal Employment Opportunity Commission, the Department of Labor, or the California Department of Fair Employment and Housing, except that I acknowledge and agree that I shall not recover any monetary benefits in connection with any such claim, charge or proceeding with regard to any claim released herein. I hereby represent and warrant that, other than the Excluded Claims, I am not aware of any claims I have or might have against any of the Released Parties that are not included in the Released Claims.

I acknowledge that I am knowingly and voluntarily waiving and releasing any rights I may have under the ADEA, and that the consideration given for the waiver and release in the preceding paragraph is in addition to anything of value to which I am already entitled. I further acknowledge that I have been advised by this writing that: (1) my waiver and release do not apply to any rights or claims that may arise after the date I sign this Release; (2) I should consult with an attorney prior to signing this Release (although I may choose voluntarily not to do so); (3) I have forty-five (45) days to consider this Release (although I may choose voluntarily to sign it earlier); (4) I have seven (7) days following the date I sign this Release to revoke it by providing written notice of revocation to the Company's Chief Executive Officer; and (5) this Release will not be effective until the date upon which the revocation period has expired, which will be the eighth calendar day after the date I sign it provided that I do not revoke it (the "Effective Date").

I UNDERSTAND THAT THIS AGREEMENT INCLUDES A RELEASE OF ALL KNOWN AND UNKNOWN CLAIMS. I acknowledge that I have read and understand Section 1542 of the California Civil Code which reads as follows: **"A general release does not extend to claims which the creditor does not know or suspect to exist in his or her favor at the time of executing the release, which if known by him or her must have materially affected his or her settlement with the debtor."** I hereby expressly waive and relinquish all rights and benefits under that section and any law or legal principle of similar effect in any jurisdiction with respect to my release of claims herein, including but not limited to the release of unknown and unsuspected claims.

I hereby represent that I have been paid all compensation owed and for all hours worked, I have received all the leave and leave benefits and protections for which I am eligible, pursuant to the Family and Medical Leave Act, the California Family Rights Act, or otherwise, and I have not suffered any on-the-job injury for which I have not already filed a workers' compensation claim.

I further agree: (1) not to disparage the Company, its parent, or its or their officers, directors, employees, shareholders, affiliates and agents, in any manner likely to be harmful to its or their business, business reputation, or personal reputation (although I may respond accurately and fully to any question, inquiry or request for information as required by legal process); (2) not to voluntarily (except in response to legal compulsion) assist any third party in bringing or pursuing any proposed or pending litigation, arbitration, administrative claim or other formal proceeding against the Company, its parent or subsidiary entities, affiliates, officers, directors, employees or agents; and (3) to reasonably cooperate with the Company, by voluntarily (without legal compulsion) providing accurate and complete information, in connection with the Company's actual or contemplated defense, prosecution, or investigation of any claims or demands by or against third parties, or other matters, arising from events, acts, or failures to act that occurred during the period of my employment by the Company.

By: _____
Date

Exhibit 10.10

Pacific Ethanol, Inc.

AMENDED AND RESTATED
EMPLOYMENT AGREEMENT
for
MICHAEL D. KANDRIS

This Amended and Restated Employment Agreement ("Agreement") by and between Michael D. Kandris ("Employee") and Pacific Ethanol, Inc. (the "Company") (collectively, the "Parties") is effective as of the last date signed by the Parties.

Whereas, the Company desires to employ Employee to provide personal services to the Company, and wishes to provide Employee with certain compensation and benefits in return for his services;

Whereas, Employee wishes to be employed by the Company and to provide personal services to the Company in return for certain compensation and benefits;

Whereas, the Parties entered into an Employment Agreement dated January 6, 2013 (the "Prior Agreement") setting forth the terms of Employee's employment with the Company and now seek to supersede and replace the Prior Agreement with this Agreement; and

Now, Therefore, in consideration of the mutual promises and covenants contained herein, it is hereby agreed by and between the parties hereto as follows:

1. Employment by the Company.

1.1 Position. Subject to terms and conditions set forth herein, the Company agrees to employ Employee in the position of Chief Operating Officer and Employee hereby accepts such employment. During the term of Employee's employment with the Company, Employee will devote Employee's best efforts and substantially all of Employee's business time and attention to the business of the Company.

1.2 Duties and Location. Employee shall perform such duties as are customarily associated with Employee's then current title. Employee's primary office location shall be a location mutually acceptable to both the Employee and the Company. The Company reserves the right to reasonably require Employee to perform Employee's duties at places other than Employee's primary office location from time to time as agreed to by Employee, and to require reasonable business travel.

1.3 Policies and Procedures. The employment relationship between the parties shall be governed by the general employment policies and practices of the Company, except that when the terms of this Agreement differ from or are in conflict with the Company's general employment policies or practices, this Agreement shall control.

2. Compensation.

2.1 Salary. For services to be rendered hereunder, Employee shall receive a bi-weekly salary of $12,715.79**,** approximately $330,611.00 on an annualized basis (the "Base Salary"), subject to standard payroll deductions and withholdings and payable in accordance with the Company's regular payroll schedule. Employee's Base Salary shall be reviewed annually and may be increased as approved by the Company's Board of Directors (the "Board") in its sole discretion.

2.2 Short Term Incentive. Employee shall be entitled to participate in the Company's Short Term Incentive plan ("STI") with a payout target of fifty percent (50%) of Employee's Base Salary. The structure of the STI from time to time, whether any STI payout will be awarded, and the amount of the STI awarded to Employee, shall be in the discretion of the Compensation Committee of the Board. Since the STI award is intended both to reward past Company and Employee performance and to provide an incentive for Employee to remain with the Company, Employee must remain an active employee through the date that any such STI award is paid in order to be entitled to receive any such award, except as otherwise provided in Section 5.2. Employee will not be paid any STI award (including a prorated award) if Employee's employment terminates for any reason before the STI is paid to him, except as otherwise provided in Section 5.2. Any earned STI shall be paid, if at all, not later than March 15th of the year following the calendar year as to which performance was measured.

2.3 Employee Benefits, Stock Options, And Incentive Compensation, And Other Compensation Plans And Programs. Employee shall be entitled to participate in such of the Company's benefit and deferred compensation plans and programs as may be made available to employees of the Company, including, without limitation, the Company's Long Term Incentive Plan, subject in each case to: (i) the generally applicable terms and conditions of the applicable plan or program and to the determinations of the Board or other person administering such plan or program, (ii) determinations by the Board or any such person as to whether and to what extent Employee shall so participate or cease to participate, and (iii) amendment, modification or termination of any such plan or program in the sole and absolute discretion of the Board. Notwithstanding the foregoing, Employee shall not be entitled to be paid any accrued but unused vacation pay that is not used in the ordinary course in accordance with the Company's vacation pay policy.

3. Confidential Information Obligations.

3.1 Confidential Information Agreement. As a condition of employment, Employee agrees to execute and abide by the Employee Confidential Information and Inventions Agreement attached hereto as Exhibit A.

3.2 Third Party Agreements and Information. Employee represents and warrants that Employee's employment by the Company will not conflict with any prior employment or consulting agreement or other agreement with any third party, and that Employee will perform Employee's duties to the Company without violating any such agreement. Employee represents and warrants that Employee does not possess confidential information arising out of prior employment, consulting, or other third party relationships, which would be used in connection with Employee's employment by the Company, except as expressly authorized by that third party. During Employee's employment by the Company, Employee will use in the performance of Employee's duties only information which is generally known and used by persons with training and experience comparable to Employee's own, common knowledge in the industry, otherwise legally in the public domain, or obtained or developed by the Company or by Employee in the course of Employee's work for the Company.

4. Outside Activities During Employment.

4.1 Non-Company Business. Except with the prior written consent of the Chief Executive Officer (in consultation with the General Counsel), Employee will not during the term of Employee's employment with the Company undertake or engage in any other employment, occupation or business enterprise, other than ones in which Employee is a passive investor. Employee may also engage in civic and not-for-profit activities so long as such activities do not materially interfere with the performance of Employee's duties hereunder.

4.2 No Adverse Interests. Employee agrees not to acquire, assume or participate in, directly or indirectly, any position, investment or interest known by him to be adverse or antagonistic to the Company, its business or prospects, financial or otherwise, except as a passive investor in mutual or exchange traded funds.

5. Termination Of Employment.

5.1 At-Will Relationship. Employee's employment relationship is at-will. Either Employee or the Company may terminate the employment relationship at any time, with or without Cause or advance notice.

5.2 Termination without Cause; Resignation for Good Reason. If, at any time, the Company terminates Employee's employment without Cause (as defined herein), or Employee resigns with Good Reason (as defined herein), and, within sixty (60) days after the Employee's Separation Date (as defined below), Employee executes and delivers the Separation Date Release of all claims set forth as Exhibit B hereto and allows such release to become effective without revoking same, then the Company will provide Employee with the following severance benefits (notwithstanding the foregoing, if any of the following severance benefits are subject to Section 409A (as defined below) and the sixty (60)-day period for executing the release and it becoming effective spans more than one calendar year, none of such severance benefits may be paid or delivered until the subsequent calendar year):

(a) Cash Severance.

(i) Qualifying Termination. Except as otherwise set forth in Section 5.2(a)(ii), in the event the Company terminates Employee's employment without Cause, or Employee resigns with Good Reason, other than in anticipation of, or on or within twenty-four (24) months after, a Change in Control (as defined below), the Company shall pay Employee severance in an amount equal to the sum of (A) twelve (12) months of Employee's Base Salary in effect on Employee's last day of employment (the "Separation Date"); and (B) 100% of the total target STI award contemplated by the Company's STI in effect on the Separation Date.

(ii) Change in Control. Notwithstanding Section 5.2(a)(i), in the event the Company terminates Employee's employment without Cause, or Employee resigns with Good Reason, in anticipation of, or on or within twenty-four (24) months after, a Change in Control, then the Company shall pay Employee severance in an amount equal to the sum of (C) twenty-four (24) months of Employee's Base Salary in effect on the Separation Date; and (D) 200% of the total target STI award contemplated by the Company's STI in effect on the Separation Date. For purposes of this Agreement, the Company will be deemed to have terminated Employee's employment, and Employee will be deemed to have resigned for Good Reason, in each case "in anticipation of" a Change in Control if Employee's employment terminates (i) prior to the Change in Control and (ii) during any period in which the Company has (A) initiated a transaction process or is engaged in substantive discussions with a third party about a specific transaction that, if consummated, would result in a Change in Control (and before the complete abandonment of such discussions without the transaction being consummated), or (B) become a party to a definitive agreement to consummate a transaction that would result in a Change in Control (and before the complete termination of such agreement without the transaction being consummated).

(iii) Payment. The cash severance shall be paid in a single lump sum as soon as administratively practicable after the effective date of the release of claims described in Section 5.2 (except as otherwise set forth above) but in no event later than the 15th day of the third month immediately following the end of the calendar year in which Employee's Separation Date occurs (subject to standard deductions and withholdings).

(b) Continued Health Insurance Coverage. To the extent provided by the federal COBRA law or, if applicable, state insurance laws, and by the Company's then-current group health insurance policies, Employee may be eligible to continue Employee's then-current group health insurance benefits after termination of Employment. If eligible and if Employee timely elects continued health insurance coverage, in the event the Company terminates Employee's employment without Cause, or Employee resigns with Good Reason, other than in anticipation of, or on or within twenty-four (24) months after, a Change in Control then the Company shall pay, on a monthly basis, the Company's portion of any premiums necessary to provide such coverage for a period of twelve (12) months after the Employee's Separation Date; **provided, however,** that no such premium payments shall be made following the effective date of Employee's coverage by a medical, dental or vision insurance plan of a subsequent employer. Employee shall notify the Company immediately if he becomes covered by a medical, dental or vision insurance plan of a subsequent employer. Notwithstanding the foregoing, in the event the Company terminates Employee's employment without Cause, or Employee resigns with Good Reason, in anticipation of, or within twenty-four (24) months on or after, a Change in Control, then (if eligible and coverage elected) the Company shall pay, on a monthly basis, the Company's portion of any premiums necessary to provide such coverage for a period of twenty-four (24) months after the Employee's Separation Date or, if earlier, until the termination of Employee's eligibility for such COBRA or, if applicable, state insurance laws, coverage; **provided, however,** that no such premium payments shall be made following the effective date of Employee's coverage by a medical, dental or vision insurance plan of a subsequent employer and Employee agrees to immediately notify the Company of any such coverage. In the event Employee is entitled to receive such coverage for a period of twenty-four (24) months after the Employee's Separation Date but Employee's right to such COBRA or, if applicable, state insurance laws, coverage expires in the ordinary course (and other than in connection with Employee's coverage by a medical, dental or vision insurance plan of a subsequent employer or as the result of any action or inaction of Employee, such as but not limited to Employee's failure to pay Employee's portion of the premiums), then, the Company shall pay, on a monthly basis, to Employee (subject to standard deductions and withholdings) a cash payment equal to the portion of the premiums the Company was paying prior to expiration of such coverage for each month after such coverage expires through twenty-four (24) months after the Employee's Separation Date, **provided, however,** that no such cash payments shall be made following the effective date of Employee's coverage by a medical, dental or vision insurance plan of a subsequent employer and Employee agrees to immediately notify the Company of any such coverage. Notwithstanding the foregoing, Employee's receipt of any amounts under this subsection are contingent upon the release of claims described in Section 5.2, so Employee may pay such amounts during this period and the Company will reimburse such amounts as soon as administratively practicable after the effective date of the release of claims described in Section 5.2 (except as otherwise set forth above) but in no event later than the 15th day of the third month immediately following the end of the calendar year in which Employee's Separation Date occurs.

(c) Accelerated Vesting. If Employee has been employed by the Company as of the Separation Date for one full year or longer, and the Company terminates Employee's employment without Cause, or Employee resigns with Good Reason, other than in anticipation of, or on or within twenty-four (24) months after, a Change in Control, then the Company will accelerate the vesting of any equity awards granted to Employee prior to Employee's Separation Date such that twenty-five percent (25%) of all shares or options subject to such awards which are unvested as of the Employee's Separation Date shall be accelerated and deemed fully vested as of the effective date of the release of claims described in Section 5.2 (except as otherwise set forth above); **provided, however**, that in the event, and without the requirement that Employee be employed for one full year or longer, the Company terminates Employee's employment without Cause, or Employee resigns with Good Reason, in anticipation of, or within twenty-four (24) months after, a Change in Control, then the Company will accelerate the vesting of any equity awards granted to Employee prior to Employee's employment termination such that one hundred percent (100%) of all shares or options subject to such awards which are unvested as of the Employee's Separation Date shall be accelerated and deemed fully vested as of the effective date of the release of claims described in Section 5.2 (except as otherwise set forth above).

5.3 Termination for Cause; Resignation Without Good Reason. If the Company terminates Employee's employment with the Company for Cause, or Employee resigns without Good Reason, then Employee will not be entitled to any further compensation from the Company (other than accrued salary through Employee's last day of employment which will be paid in the ordinary course and any vested benefits under the Company's benefit plans in which Employee participated prior to the Separation Date in accordance with the terms of such plans), including severance pay, pay in lieu of notice or any other such compensation.

5.4 Termination Due to Death or Disability.

(a) Death. This Agreement and Employee's employment shall terminate immediately upon Employee's death and Employee's estate shall not be entitled to any further compensation from the Company (other than accrued salary through Employee's last day of employment which will be paid in the ordinary course and any vested benefits under the Company's benefit plans in which Employee participated prior to the Separation Date in accordance with the terms of such), including severance pay, pay in lieu of notice or any other such compensation.

(b) Disability. If Employee is prevented from performing his duties as described in Section 1.1 of this Agreement by reason of any physical or mental incapacity, with or without reasonable accommodation, that results in Employee's satisfaction of all requirements necessary to receive benefits under the Company's long-term disability plan due to a total disability, then, to the extent permitted by law, the Company may terminate the employment of Employee and this Agreement at such time. In such an event, and if Employee or someone authorized to act on his behalf executes and delivers the Separation Date Release described in section 5.2 and allows such release to become effective, within the timeframe set forth above, then the Company shall pay Employee severance in a single lump sum equal to twelve (12) months of Employee's Base Salary in effect on Employee's Separation Date. This severance shall be paid on the Company's first regular payroll schedule (subject to standard deductions and withholdings) after the effective date of the release of claims (or as otherwise set forth above in connection with such release as described above) but in no event later than the 15th day of the third month immediately following the end of the calendar year in which Employee's Separation Date occurs. The severance benefits provided for in this Section 5.4 shall be reduced by any amounts expected to be paid to Employee in connection with any federal or state disability insurance payments or benefits, and any private insurance disability payments or benefits, to be provided to Employee within the twelve (12) months following Employee's Separation Date.

5.5 Deferred Compensation. Notwithstanding anything to the contrary set forth herein, any payments and benefits provided under this Agreement (the "Severance Benefits") that constitute "deferred compensation" within the meaning of Section 409A of the Internal Revenue Code of 1986, as amended (the "Code") and the regulations and other guidance thereunder and any state law of similar effect (collectively "Section 409A") shall not commence in connection with Employee's termination of employment unless and until Employee has also incurred a "separation from service" (as such term is defined in Treasury Regulation Section 1.409A-1(h) ("Separation From Service"), unless the Company reasonably determines that such amounts may be provided to Employee without causing Employee to incur the additional 20% tax under Section 409A.

It is intended that each installment of the Severance Benefits payments provided for in this Agreement is a separate "payment" for purposes of Treasury Regulation Section 1.409A-2(b)(2)(i). For the avoidance of doubt, it is intended that payments of the Severance Benefits set forth in this Agreement satisfy, to the greatest extent possible, the exemptions from the application of Section 409A provided under Treasury Regulation Sections 1.409A-1(b)(4), 1.409A-1(b)(5) and 1.409A-1(b)(9).

If Employee is a "specified employee" within the meaning of 409A(a)(2)(B)(i) of the Code, no Severance Benefit payments that are nonqualified deferred compensation subject to Section 409A and are triggered by a separation from service shall be paid until the later of six (6) months after Employee's Separation Date of, if earlier, Employee's death. All such payments will be accumulated and paid within thirty (30) days after the expiration of such delay period. However, it is intended that payments to Employee will be exempt from Section 409A under the "short-term deferral" rule set forth in Section 1.409A-1(b)(4) of the Treasury Regulations and not likely to be delayed pursuant to this provision.

Notwithstanding any other payment schedule set forth in this Agreement, none of the Severance Benefits will be paid or otherwise delivered prior to the effective date of the Separation Date Release of all claims set forth as Exhibit B hereto. All amounts payable under the Agreement will be subject to standard payroll taxes and deductions. Notwithstanding any other provision of this Agreement, the Company shall not be liable to Employee or any other person if payments under this Agreement fail to be exempt from, or compliant with, Section 409A. Employee is solely responsible for the tax consequences of any payments hereunder.

5.6 Limitation on Payments. In the event that the payments or other benefits provided for in this Agreement or otherwise payable to Employee (i) constitute "parachute payments" within the meaning of Section 280G of the Code, and (ii) would be subject to the excise tax imposed by Section 4999 of the Code (the "Excise Tax"), then Employee's benefits under this Agreement shall be either (a) delivered in full, or (b) delivered to such lesser extent which would result in no portion of such benefits being subject to the Excise Tax, whichever of the foregoing amounts, taking into account the applicable federal, state and local income taxes and the Excise Tax, results in the receipt by Employee on an after-tax basis, of the greatest amount of benefits, notwithstanding that all or some portion of such benefits may be taxable under Section 4999 of the Code. If a reduction in payments or benefits constituting "parachute payments" is necessary pursuant to the foregoing provision, reduction shall occur pro rata in the following order: reduction of cash payments; cancellation of accelerated vesting of stock awards; reduction of employee benefits. If acceleration of vesting of stock award compensation is to be reduced, such acceleration of vesting shall be cancelled in the reverse order of the date of grant of the Employee's stock awards.

5.7 No Mitigation. Employee shall not be required to mitigate damages or the amount of any payment provided for under this Agreement by seeking other employment or otherwise, nor shall the amount of any payment provided for under this Agreement be reduced by any compensation earned by Employee as the result of employment by another employer after the date of termination, or otherwise, except for health insurance benefits as set forth herein.

5.8 Definitions.

(a) For purposes of this Agreement, "**Cause**" shall mean any one or more of the following:

(i) Employee's indictment or conviction of any felony or of any crime involving dishonesty;

(ii) Employee's participation in any fraud or other act of willful misconduct against the Company (including any material breach of Company policy that causes or reasonably could cause harm to the Company);

(iii) Employee's refusal to comply with any lawful directive of the Company;

(iv) Employee's material breach of Employee's fiduciary, statutory, contractual, or common law duties to the Company (including any material breach of this Agreement or the Confidential Information and Inventions Agreement); or

(v) Conduct by Employee which in the good faith and reasonable determination of the Board demonstrates gross unfitness to serve.

Provided, however, that in the event that any of the foregoing events is reasonably capable of being cured, the Company shall, within twenty (20) days after the discovery of such event, provide written notice to the Employee describing the nature of such event and Employee shall thereafter have ten (10) business days to cure such event.

(b) For purposes of this Agreement, Employee shall have "**Good Reason"** for Employee's resignation if: (w) any of the following occurs without Employee's consent; (x) Employee notifies the Company in writing, within twenty (20) days after the occurrence of one of the following events that Employee intends to terminate his employment no earlier than thirty (30) days after providing such notice; (y) the Company does not cure such condition within thirty (30) days following its receipt of such notice or states unequivocally in writing that it does not intend to attempt to cure such condition, and (z) the Employee resigns from employment within thirty (30) days following the end of the period within which the Company was entitled to remedy the condition constituting Good Reason but failed to do so:

(i) the assignment to Employee of any duties or responsibilities which result in the material diminution of Employee's authority, duties or responsibility; **provided, however,** that the acquisition of the Company and subsequent conversion of the Company to a division or unit of the acquiring corporation will not by itself result in a material diminution of Employee's authority, duties or responsibility;

(ii) a material reduction by the Company in Employee's annual base salary, except to the extent the base salaries of all other executive officers of the Company are accordingly reduced;

(iii) a relocation of Employee's place of work, or the Company's principal executive offices if Employee's principal office is at such offices, to a location that increases Employee's daily one-way commute by more than thirty-five (35) miles; or

(iv) any material breach by the Company of any material provision of this Agreement, including but not limited to Section 7.7.

(c) For purposes of this Agreement, **"Change in Control"** shall be deemed to have occurred if, in a single transaction or series of related transactions: (i) any person (as such term is used in Section 13(d) and 14(d) of the Securities Exchange Act of 1934 ("Exchange Act")), or persons acting as a group, other than a trustee or fiduciary holding securities under an employment benefit program, is or becomes a "beneficial owner" (as defined in Rule 13-3 under the Exchange Act), directly or indirectly of securities of the Company representing a majority (*e.g.*, 50% plus one share) of the combined voting power of the Company, (ii) there is a merger, consolidation or other business combination transaction of the Company with or into another corporation, entity or person, other than a transaction in which the holders of at least a majority of the shares of voting capital stock of the Company outstanding immediately prior to such transaction continue to hold (either by such shares remaining outstanding or by their being converted into shares of voting capital stock of the surviving entity) a majority of the total voting power represented by the shares of voting capital stock of the Company (or the surviving entity) outstanding immediately after such transaction, or (iii) all or substantially all of the Company's assets are sold.

6. Arbitration.

To ensure the timely and economical resolution of disputes that may arise in connection with Employee's employment with the Company, Employee and the Company agree that any and all disputes, claims, or causes of action arising from or relating to the enforcement, breach, performance, negotiation, execution, or interpretation of this Agreement, Employee's employment, or the termination of Employee's employment, shall be resolved to the fullest extent permitted by law by final, binding and confidential arbitration, by a single arbitrator, in Sacramento, California, conducted by JAMS under the then applicable JAMS rules. **By agreeing to this arbitration procedure, both Employee and the Company waive the right to resolve any such dispute through a trial by jury or judge or administrative proceeding.** The arbitrator shall: (a) have the authority to compel adequate discovery for the resolution of the dispute and to award such relief as would otherwise be permitted by law; and (b) issue a written arbitration decision, to include the arbitrator's essential findings and conclusions and a statement of the award. The arbitrator shall be authorized to award any or all remedies that Employee or the Company would be entitled to seek in a court of law. The Company shall pay all JAMS' arbitration fees in excess of the amount of court fees that would be required if the dispute were decided in a court of law. Nothing in this Agreement is intended to prevent either Employee or the Company from obtaining injunctive relief in court to prevent irreparable harm pending the conclusion of any such arbitration.

7. General Provisions.

7.1 Notices. Any notices provided hereunder must be in writing and shall be deemed effective upon the earlier of personal delivery (including personal delivery by fax) or the next day after sending by overnight carrier, to the Company at its primary office location and to Employee at his address as listed on the Company payroll.

7.2 Severability. Whenever possible, each provision of this Agreement will be interpreted in such manner as to be effective and valid under applicable law, but if any provision of this Agreement is held to be invalid, illegal or unenforceable in any respect under any applicable law or rule in any jurisdiction, such invalidity, illegality or unenforceability will not affect any other provision or any other jurisdiction, but this Agreement will be reformed, construed and enforced in such jurisdiction to the extent possible in keeping with the intent of the parties.

7.3 Waiver. Any waiver of any breach of any provisions of this Agreement must be in writing to be effective, and it shall not thereby be deemed to have waived any preceding or succeeding breach of the same or any other provision of this Agreement.

7.4 Complete Agreement. This Agreement, including Exhibit A, constitutes the entire agreement between Employee and the Company and it is the complete, final, and exclusive embodiment of their agreement with regard to this subject matter. This Agreement supersedes and replaces the Prior Agreement in its entirety and the Prior Agreement shall have no further force or effect. It is entered into without reliance on any promise or representation other than those expressly contained herein, and it cannot be modified or amended except in a writing signed by the Employee and a duly authorized officer of the Company.

7.5 Counterparts. This Agreement may be executed in separate counterparts, any one of which need not contain signatures of more than one party, but all of which taken together will constitute one and the same Agreement.

7.6 Headings. The headings of the sections hereof are inserted for convenience only and shall not be deemed to constitute a part hereof nor to affect the meaning thereof.

7.7 Successors and Assigns. This Agreement is intended to bind and inure to the benefit of and be enforceable by Employee and the Company, and their respective successors, assigns, heirs, executors and administrators, except that Employee may not assign any of his duties hereunder and he may not assign any of his rights hereunder without the written consent of the Company, which shall not be withheld unreasonably. The Company shall obtain the assumption of this Agreement by any successor or assign of the Company.

7.8 Choice of Law. All questions concerning the construction, validity and interpretation of this Agreement will be governed by the law of the State of California.

In Witness Whereof, the parties have executed this Agreement.

Pacific Ethanol, Inc.

By: /s/ Neil M. Koehler
Neil M. Koehler
President and Chief Executive Officer

Date: November 7, 2016

Understood and Agreed:

Employee

/s/ Michael D. Kandris
Michael D. Kandris

Date: November 7, 2016

Exhibit A

EMPLOYEE CONFIDENTIAL INFORMATION AND INVENTIONS ASSIGNMENT AGREEMENT

In consideration of my employment or continued employment by Pacific Ethanol, Inc. ("**Company**"), and the compensation paid to me now and during my employment with the Company, I agree to the terms of this Agreement as follows:

1. Confidential Information Protections.

1.1 Nondisclosure; Recognition of Company's Rights. At all times during and after my employment, I will hold in confidence and will not disclose, use, lecture upon, or publish any of Company's Confidential Information (defined below), except as may be required in connection with my work for Company, or as expressly authorized by the Chief Executive Officer (the "**CEO**") of Company. I will obtain the CEO's written approval before publishing or submitting for publication any material (written, oral, or otherwise) that relates to my work at Company and/or incorporates any Confidential Information. I hereby assign to Company any rights I may have or acquire in any and all Confidential Information and recognize that all Confidential Information shall be the sole and exclusive property of Company and its assigns.

1.2 Confidential Information. The term "**Confidential Information**" shall mean any and all confidential knowledge, data or information related to Company's business or its actual or demonstrably anticipated research or development, including without limitation (a) trade secrets, inventions, ideas, processes, computer source and object code, data, formulae, programs, other works of authorship, know-how, improvements, discoveries, developments, designs, and techniques; (b) information regarding products, services, plans for research and development, marketing and business plans, budgets, financial statements, contracts, prices, suppliers, and customers; (c) information regarding the skills and compensation of Company's employees, contractors, and any other service providers of Company; and (d) the existence of any business discussions, negotiations, or agreements between Company and any third party.

1.3 Third Party Information. I understand that Company has received and in the future will receive from third parties confidential or proprietary information (**"Third Party Information"**) subject to a duty on Company's part to maintain the confidentiality of such information and to use it only for certain limited purposes. During and after the term of my employment, I will hold Third Party Information in strict confidence and will not disclose to anyone (other than Company personnel who need to know such information in connection with their work for Company) or use, Third Party Information, except in connection with my work for Company or unless expressly authorized by an officer of Company in writing.

1.4 No Improper Use of Information of Prior Employers and Others. I represent that my employment by Company does not and will not breach any agreement with any former employer, including any noncompete agreement or any agreement to keep in confidence or refrain from using information acquired by me prior to my employment by Company. I further represent that I have not entered into, and will not enter into, any agreement, either written or oral, in conflict with my obligations under this Agreement. During my employment by Company, I will not improperly make use of, or disclose, any information or trade secrets of any former employer or other third party, nor will I bring onto the premises of Company or use any unpublished documents or any property belonging to any former employer or other third party, in violation of any lawful agreements with that former employer or third party. I will use in the performance of my duties only information that is generally known and used by persons with training and experience comparable to my own, is common knowledge in the industry or otherwise legally in the public domain, or is otherwise provided or developed by Company.

2. Inventions.

2.1 Inventions and Intellectual Property Rights. As used in this Agreement, the term **"Invention"** means any ideas, concepts, information, materials, processes, data, programs, know-how, improvements, discoveries, developments, designs, artwork, formulae, other copyrightable works, and techniques and all Intellectual Property Rights in any of the items listed above. The term **"Intellectual Property Rights"** means all trade secrets, copyrights, trademarks, mask work rights, patents and other intellectual property rights recognized by the laws of any jurisdiction or country.

2.2 Prior Inventions. I have disclosed on **Exhibit A** a complete list of all Inventions that (a) I have, or I have caused to be, alone or jointly with others, conceived, developed, or reduced to practice prior to the commencement of my employment by Company; (b) in which I have an ownership interest or which I have a license to use; (c) and that I wish to have excluded from the scope of this Agreement (collectively referred to as "**Prior Inventions**"). If no Prior Inventions are listed in **Exhibit A**, I warrant that there are no Prior Inventions. I agree that I will not incorporate, or permit to be incorporated, Prior Inventions in any Company Inventions (defined below) without Company's prior written consent. If, in the course of my employment with Company, I incorporate a Prior Invention into a Company process, machine or other work, I hereby grant Company a non-exclusive, perpetual, fully-paid and royalty-free, irrevocable and worldwide license, with rights to sublicense through multiple levels of sublicensees, to reproduce, make derivative works of, distribute, publicly perform, and publicly display in any form or medium, whether now known or later developed, make, have made, use, sell, import, offer for sale, and exercise any and all present or future rights in, such Prior Invention.

2.3 Assignment of Company Inventions. Inventions assigned to the Company or to a third party as directed by the Company pursuant to the section titled "Government or Third Party" are referred to in this Agreement as "**Company Inventions**." Subject to the section titled "Government or Third Party" and except for Inventions that I can prove qualify fully under the provisions of California Labor Code section 2870 and I have set forth in **Exhibit A**, I hereby assign and agree to assign in the future (when any such Inventions or Intellectual Property Rights are first reduced to practice or first fixed in a tangible medium, as applicable) to Company all my right, title, and interest in and to any and all Inventions (and all Intellectual Property Rights with respect thereto) made, conceived, reduced to practice, or learned by me, either alone or with others, during the period of my employment by Company.

2.4 Obligation to Keep Company Informed. During the period of my employment and for one (1) year after my employment ends, I will promptly and fully disclose to Company in writing (a) all Inventions authored, conceived, or reduced to practice by me, either alone or with others, including any that might be covered under California Labor Code section 2870, and (b) all patent applications filed by me or in which I am named as an inventor or co-inventor.

2.5 Government or Third Party. I agree that, as directed by the Company, I will assign to a third party, including without limitation the United States, all my right, title, and interest in and to any particular Company Invention.

2.6 Enforcement of Intellectual Property Rights and Assistance. During and after the period of my employment, I will assist Company in every proper way to obtain and enforce United States and foreign Intellectual Property Rights relating to Company Inventions in all countries. If the Company is unable to secure my signature on any document needed in connection with such purposes, I hereby irrevocably designate and appoint Company and its duly authorized officers and agents as my agent and attorney in fact, which appointment is coupled with an interest, to act on my behalf to execute and file any such documents and to do all other lawfully permitted acts to further such purposes with the same legal force and effect as if executed by me.

2.7 Incorporation of Software Code. I agree that I will not incorporate into any Company software or otherwise deliver to Company any software code licensed under the GNU General Public License or Lesser General Public License or any other license that, by its terms, requires or conditions the use or distribution of such code on the disclosure, licensing, or distribution of any source code owned or licensed by Company.

3. Records. I agree to keep and maintain adequate and current records (in the form of notes, sketches, drawings and in any other form that is required by the Company) of all Inventions made by me during the period of my employment by the Company, which records shall be available to, and remain the sole property of, the Company at all times.

4. Additional Activities. I agree that (a) during the term of my employment by Company, I will not, without Company's express written consent, engage in any employment or business activity that is competitive with, or would otherwise conflict with my employment by, Company, and (b) for the period of my employment by Company and for one (l) year thereafter, I will not, either directly or indirectly, solicit or attempt to solicit any employee, independent contractor, or consultant of Company to terminate his, her or its relationship with Company in order to become an employee, consultant, or independent contractor to or for any other person or entity.

5. Return Of Company Property. Upon termination of my employment or upon Company's request at any other time, I will deliver to Company all of Company's property, equipment, and documents, together with all copies thereof, and any other material containing or disclosing any Inventions, Third Party Information or Confidential Information and certify in writing that I have fully complied with the foregoing obligation. I agree that I will not copy, delete, or alter any information contained upon my Company computer or Company equipment before I return it to Company. In addition, if I have used any personal computer, server, or e-mail system to receive, store, review, prepare or transmit any Company information, including but not limited to, Confidential Information, I agree to provide the Company with a computer-useable copy of all such Confidential Information and then permanently delete and expunge such Confidential Information from those systems; and I agree to provide the Company access to my system as reasonably requested to verify that the necessary copying and/or deletion is completed. I further agree that any property situated on Company's premises and owned by Company is subject to inspection by Company's personnel at any time with or without notice. Prior to the termination of my employment or promptly after termination of my employment, I will cooperate with Company in attending an exit interview and certify in writing that I have complied with the requirements of this section.

6. Notification Of New Employer. If I leave the employ of Company, I consent to the notification of my new employer of my rights and obligations under this Agreement, by Company providing a copy of this Agreement or otherwise.

7. General Provisions.

7.1 Governing Law and Venue. This Agreement and any action related thereto will be governed and interpreted by and under the laws of the State of California, without giving effect to any conflicts of laws principles that require the application of the law of a different state. I expressly consent to personal jurisdiction and venue in the state and federal courts for the county in which Company's principal place of business is located for any lawsuit filed there against me by Company arising from or related to this Agreement.

7.2 Severability. If any provision of this Agreement is, for any reason, held to be invalid or unenforceable, the other provisions of this Agreement will remain enforceable and the invalid or unenforceable provision will be deemed modified so that it is valid and enforceable to the maximum extent permitted by law.

7.3 Survival. This Agreement shall survive the termination of my employment and the assignment of this Agreement by Company to any successor or other assignee and be binding upon my heirs and legal representatives.

7.4 Employment. I agree and understand that nothing in this Agreement shall give me any right to continued employment by Company, and it will not interfere in any way with my right or Company's right to terminate my employment at any time, with or without cause and with or without advance notice.

7.5 Notices. Each party must deliver all notices or other communications required or permitted under this Agreement in writing to the other party at the address listed on the signature page, by courier, by certified or registered mail (postage prepaid and return receipt requested), or by a nationally-recognized express mail service. Notice will be effective upon receipt or refusal of delivery. If delivered by certified or registered mail, notice will be considered to have been given five (5) business days after it was mailed, as evidenced by the postmark. If delivered by courier or express mail service, notice will be considered to have been given on the delivery date reflected by the courier or express mail service receipt. Each party may change its address for receipt of notice by giving notice of the change to the other party.

7.6 Injunctive Relief. I acknowledge that, because my services are personal and unique and because I will have access to the Confidential Information of Company, any breach of this Agreement by me would cause irreparable injury to Company for which monetary damages would not be an adequate remedy and, therefore, will entitle Company to injunctive relief (including specific performance). The rights and remedies provided to each party in this Agreement are cumulative and in addition to any other rights and remedies available to such party at law or in equity.

7.7 Waiver. Any waiver or failure to enforce any provision of this Agreement on one occasion will not be deemed a waiver of that provision or any other provision on any other occasion.

7.8 Export. I agree not to export, directly or indirectly, any U.S. technical data acquired from Company or any products utilizing such data, to countries outside the United States, because such export could be in violation of the United States export laws or regulations.

7.9 Entire Agreement. If no other agreement governs nondisclosure and assignment of inventions during any period in which I was previously employed or am in the future employed by Company as an independent contractor, the obligations pursuant to sections of this Agreement titled "Confidential Information Protections" and "Inventions" shall apply. This Agreement is the final, complete and exclusive agreement of the parties with respect to the subject matter hereof and supersedes and merges all prior communications between us with respect to such matters. No modification of or amendment to this Agreement, or any waiver of any rights under this Agreement, will be effective unless in writing and signed by me and the CEO of Company. Any subsequent change or changes in my duties, salary or compensation will not affect the validity or scope of this Agreement.

This Agreement shall be effective as of the first day of my employment with Company.

EMPLOYEE:

I have read, understand, and Accept this agreement and have been given the opportunity to Review it with independent legal counsel.

_____
(Signature)

By: _____

Title: _____

Date: _____

Address: _____

COMPANY:

Accepted and agreed:

_____
(Signature)

By: _____

Title: _____

Date: _____

Address: _____

EXHIBIT A

INVENTIONS

1. Prior Inventions Disclosure. The following is a complete list of all Prior Inventions (as provided in Section 2.2 of the attached Employee Confidential Information and Inventions Assignment Agreement, defined herein as the "Agreement"):

[_] None

[_] See immediately below:

_____

_____

2. Limited Exclusion Notification.

This is to notify you in accordance with Section 2872 of the California Labor Code that the foregoing Agreement between you and Company does not require you to assign or offer to assign to Company any Invention that you develop entirely on your own time without using Company's equipment, supplies, facilities or trade secret information, except for those Inventions that either:

a . Relate at the time of conception or reduction to practice to Company's business, or actual or demonstrably anticipated research or development; or

b. Result from any work performed by you for Company.

To the extent a provision in the foregoing Agreement purports to require you to assign an Invention otherwise excluded from the preceding paragraph, the provision is against the public policy of this state and is unenforceable.

This limited exclusion does not apply to any patent or Invention covered by a contract between Company and the United States or any of its agencies requiring full title to such patent or Invention to be in the United States.

Exhibit B

Separation Date Release

(To be signed and become effective on or within 60 days after the employment termination date.)

In exchange for the severance benefits to be provided to me by Pacific Ethanol, Inc. (the "Company") pursuant to the terms of my Employment Agreement (the "Agreement"), I hereby provide the following General Release of Claims (the "Release"). I understand that, on the last date of my employment with the Company, the Company will pay me any accrued salary to which I am entitled by law, regardless of whether I sign this Release, but I am not entitled to any severance benefits unless I sign and return this Release to the Company and I allow it to become effective.

I hereby generally and completely release the Company and its directors, officers, employees, shareholders, partners, agents, attorneys, predecessors, successors, parent and subsidiary entities, insurers, affiliates, and assigns (collectively the "Released Parties") of and from any and all claims, liabilities and obligations, both known and unknown, arising out of or in any way related to events, acts, conduct, or omissions occurring at any time prior to or at the time that I sign this Release.

This general release includes, but is not limited to: (1) all claims arising out of or in any way related to my employment with the Company or the termination of that employment; (2) all claims related to my compensation or benefits from the Company, including salary, incentive awards, bonuses, commissions, vacation pay, expense reimbursements, severance pay, fringe benefits, stock, stock options, or any other ownership or equity interests in the Company; (3) all claims for breach of contract, wrongful termination, and breach of the implied covenant of good faith and fair dealing (including claims based on or arising under the Agreement); (4) all tort claims, including claims for fraud, defamation, emotional distress, and discharge in violation of public policy; and (5) all federal, state, and local statutory claims, including claims for discrimination, harassment, retaliation, attorneys' fees, or other claims arising under the federal Civil Rights Act of 1964 (as amended), the federal Americans with Disabilities Act of 1990, the federal Age Discrimination in Employment Act (as amended) ("ADEA"), the federal Family and Medical Leave Act, the California Labor Code (as amended), the California Family Rights Act, and the California Fair Employment and Housing Act (as amended).

I understand that notwithstanding the foregoing, the following are not included in the Released Claims (the "Excluded Claims"): (i) any rights or claims for indemnification I may have pursuant to any written indemnification agreement to which I am a party, the charter, bylaws, or operating agreements of any of the Released Parties, or under applicable law; or (ii) any rights which are not waivable as a matter of law. In addition, I understand that nothing in this release prevents me from filing, cooperating with, or participating in any proceeding before the Equal Employment Opportunity Commission, the Department of Labor, or the California Department of Fair Employment and Housing, except that I acknowledge and agree that I shall not recover any monetary benefits in connection with any such claim, charge or proceeding with regard to any claim released herein. I hereby represent and warrant that, other than the Excluded Claims, I am not aware of any claims I have or might have against any of the Released Parties that are not included in the Released Claims.

I acknowledge that I am knowingly and voluntarily waiving and releasing any rights I may have under the ADEA, and that the consideration given for the waiver and release in the preceding paragraph is in addition to anything of value to which I am already entitled. I further acknowledge that I have been advised by this writing that: (1) my waiver and release do not apply to any rights or claims that may arise after the date I sign this Release; (2) I should consult with an attorney prior to signing this Release (although I may choose voluntarily not to do so); (3) I have forty-five (45) days to consider this Release (although I may choose voluntarily to sign it earlier); (4) I have seven (7) days following the date I sign this Release to revoke it by providing written notice of revocation to the Company's Chief Executive Officer; and (5) this Release will not be effective until the date upon which the revocation period has expired, which will be the eighth calendar day after the date I sign it provided that I do not revoke it (the "Effective Date").

I UNDERSTAND THAT THIS AGREEMENT INCLUDES A RELEASE OF ALL KNOWN AND UNKNOWN CLAIMS. I acknowledge that I have read and understand Section 1542 of the California Civil Code which reads as follows: **"A general release does not extend to claims which the creditor does not know or suspect to exist in his or her favor at the time of executing the release, which if known by him or her must have materially affected his or her settlement with the debtor."** I hereby expressly waive and relinquish all rights and benefits under that section and any law or legal principle of similar effect in any jurisdiction with respect to my release of claims herein, including but not limited to the release of unknown and unsuspected claims.

I hereby represent that I have been paid all compensation owed and for all hours worked, I have received all the leave and leave benefits and protections for which I am eligible, pursuant to the Family and Medical Leave Act, the California Family Rights Act, or otherwise, and I have not suffered any on-the-job injury for which I have not already filed a workers' compensation claim.

I further agree: (1) not to disparage the Company, its parent, or its or their officers, directors, employees, shareholders, affiliates and agents, in any manner likely to be harmful to its or their business, business reputation, or personal reputation (although I may respond accurately and fully to any question, inquiry or request for information as required by legal process); (2) not to voluntarily (except in response to legal compulsion) assist any third party in bringing or pursuing any proposed or pending litigation, arbitration, administrative claim or other formal proceeding against the Company, its parent or subsidiary entities, affiliates, officers, directors, employees or agents; and (3) to reasonably cooperate with the Company, by voluntarily (without legal compulsion) providing accurate and complete information, in connection with the Company's actual or contemplated defense, prosecution, or investigation of any claims or demands by or against third parties, or other matters, arising from events, acts, or failures to act that occurred during the period of my employment by the Company.

By: _____
Date

Exhibit 10.11

Pacific Ethanol, Inc.

AMENDED AND RESTATED
EMPLOYMENT AGREEMENT
for
PAUL P. KOEHLER

This Amended and Restated Employment Agreement ("Agreement") by and between Paul P. Koehler ("Employee") and Pacific Ethanol, Inc. (the "Company") (collectively, the "Parties") is effective as of the last date signed by the Parties.

Whereas, the Company desires to employ Employee to provide personal services to the Company, and wishes to provide Employee with certain compensation and benefits in return for his services;

Whereas, Employee wishes to be employed by the Company and to provide personal services to the Company in return for certain compensation and benefits;

Whereas, the Parties entered into an Employment Agreement dated October 1, 2012 (the "Prior Agreement") setting forth the terms of Employee's employment with the Company and now seek to supersede and replace the Prior Agreement with this Agreement; and

Now, Therefore, in consideration of the mutual promises and covenants contained herein, it is hereby agreed by and between the parties hereto as follows:

1. Employment by the Company.

1.1 Position. Subject to terms and conditions set forth herein, the Company agrees to employ Employee in the position of Vice President, Commodities and Corporate Development and Employee hereby accepts such employment. During the term of Employee's employment with the Company, Employee will devote Employee's best efforts and substantially all of Employee's business time and attention to the business of the Company.

1.2 Duties and Location. Employee shall perform such duties as are customarily associated with Employee's then current title. Employee's primary office location shall be a location mutually acceptable to both the Employee and the Company. The Company reserves the right to reasonably require Employee to perform Employee's duties at places other than Employee's primary office location from time to time as agreed to by Employee, and to require reasonable business travel.

1.3 Policies and Procedures. The employment relationship between the parties shall be governed by the general employment policies and practices of the Company, except that when the terms of this Agreement differ from or are in conflict with the Company's general employment policies or practices, this Agreement shall control.

2. Compensation.

2.1 Salary. For services to be rendered hereunder, Employee shall receive a bi-weekly salary of $9,444.23**,** approximately $245,550.00 on an annualized basis (the "Base Salary"), subject to standard payroll deductions and withholdings and payable in accordance with the Company's regular payroll schedule. Employee's Base Salary shall be reviewed annually and may be increased as approved by the Company's Board of Directors (the "Board") in its sole discretion.

2.2 Short Term Incentive. Employee shall be entitled to participate in the Company's Short Term Incentive plan ("STI") with a payout target of fourty percent (40%) of Employee's Base Salary. The structure of the STI from time to time, whether any STI payout will be awarded, and the amount of the STI awarded to Employee, shall be in the discretion of the Compensation Committee of the Board. Since the STI award is intended both to reward past Company and Employee performance and to provide an incentive for Employee to remain with the Company, Employee must remain an active employee through the date that any such STI award is paid in order to be entitled to receive any such award, except as otherwise provided in Section 5.2. Employee will not be paid any STI award (including a prorated award) if Employee's employment terminates for any reason before the STI is paid to him, except as otherwise provided in Section 5.2. Any earned STI shall be paid, if at all, not later than March 15th of the year following the calendar year as to which performance was measured.

2.3 Employee Benefits, Stock Options, And Incentive Compensation, And Other Compensation Plans And Programs. Employee shall be entitled to participate in such of the Company's benefit and deferred compensation plans and programs as may be made available to employees of the Company, including, without limitation, the Company's Long Term Incentive Plan, subject in each case to: (i) the generally applicable terms and conditions of the applicable plan or program and to the determinations of the Board or other person administering such plan or program, (ii) determinations by the Board or any such person as to whether and to what extent Employee shall so participate or cease to participate, and (iii) amendment, modification or termination of any such plan or program in the sole and absolute discretion of the Board. Notwithstanding the foregoing, Employee shall not be entitled to be paid any accrued but unused vacation pay that is not used in the ordinary course in accordance with the Company's vacation pay policy.

3. Confidential Information Obligations.

3.1 Confidential Information Agreement. As a condition of employment, Employee agrees to execute and abide by the Employee Confidential Information and Inventions Agreement attached hereto as Exhibit A.

3.2 Third Party Agreements and Information. Employee represents and warrants that Employee's employment by the Company will not conflict with any prior employment or consulting agreement or other agreement with any third party, and that Employee will perform Employee's duties to the Company without violating any such agreement. Employee represents and warrants that Employee does not possess confidential information arising out of prior employment, consulting, or other third party relationships, which would be used in connection with Employee's employment by the Company, except as expressly authorized by that third party. During Employee's employment by the Company, Employee will use in the performance of Employee's duties only information which is generally known and used by persons with training and experience comparable to Employee's own, common knowledge in the industry, otherwise legally in the public domain, or obtained or developed by the Company or by Employee in the course of Employee's work for the Company.

4. Outside Activities During Employment.

4.1 Non-Company Business. Except with the prior written consent of the Chief Executive Officer (in consultation with the General Counsel), Employee will not during the term of Employee's employment with the Company undertake or engage in any other employment, occupation or business enterprise, other than ones in which Employee is a passive investor. Employee may also engage in civic and not-for-profit activities so long as such activities do not materially interfere with the performance of Employee's duties hereunder.

4.2 No Adverse Interests. Employee agrees not to acquire, assume or participate in, directly or indirectly, any position, investment or interest known by him to be adverse or antagonistic to the Company, its business or prospects, financial or otherwise, except as a passive investor in mutual or exchange traded funds.

5. Termination Of Employment.

5.1 At-Will Relationship. Employee's employment relationship is at-will. Either Employee or the Company may terminate the employment relationship at any time, with or without Cause or advance notice.

5.2 Termination without Cause; Resignation for Good Reason. If, at any time, the Company terminates Employee's employment without Cause (as defined herein), or Employee resigns with Good Reason (as defined herein), and, within sixty (60) days after the Employee's Separation Date (as defined below), Employee executes and delivers the Separation Date Release of all claims set forth as Exhibit B hereto and allows such release to become effective without revoking same, then the Company will provide Employee with the following severance benefits (notwithstanding the foregoing, if any of the following severance benefits are subject to Section 409A (as defined below) and the sixty (60)-day period for executing the release and it becoming effective spans more than one calendar year, none of such severance benefits may be paid or delivered until the subsequent calendar year):

(a) Cash Severance.

(i) Qualifying Termination. Except as otherwise set forth in Section 5.2(a)(ii), in the event the Company terminates Employee's employment without Cause, or Employee resigns with Good Reason, other than in anticipation of, or on or within twenty-four (24) months after, a Change in Control (as defined below), the Company shall pay Employee severance in an amount equal to the sum of (A) twelve (12) months of Employee's Base Salary in effect on Employee's last day of employment (the "Separation Date"); and (B) 100% of the total target STI award contemplated by the Company's STI in effect on the Separation Date.

(ii) Change in Control. Notwithstanding Section 5.2(a)(i), in the event the Company terminates Employee's employment without Cause, or Employee resigns with Good Reason, in anticipation of, or on or within twenty-four (24) months after, a Change in Control, then the Company shall pay Employee severance in an amount equal to the sum of (C) twenty-four (24) months of Employee's Base Salary in effect on the Separation Date; and (D) 200% of the total target STI award contemplated by the Company's STI in effect on the Separation Date. For purposes of this Agreement, the Company will be deemed to have terminated Employee's employment, and Employee will be deemed to have resigned for Good Reason, in each case "in anticipation of" a Change in Control if Employee's employment terminates (i) prior to the Change in Control and (ii) during any period in which the Company has (A) initiated a transaction process or is engaged in substantive discussions with a third party about a specific transaction that, if consummated, would result in a Change in Control (and before the complete abandonment of such discussions without the transaction being consummated), or (B) become a party to a definitive agreement to consummate a transaction that would result in a Change in Control (and before the complete termination of such agreement without the transaction being consummated).

(iii) Payment. The cash severance shall be paid in a single lump sum as soon as administratively practicable after the effective date of the release of claims described in Section 5.2 (except as otherwise set forth above) but in no event later than the 15th day of the third month immediately following the end of the calendar year in which Employee's Separation Date occurs (subject to standard deductions and withholdings).

(b) Continued Health Insurance Coverage. To the extent provided by the federal COBRA law or, if applicable, state insurance laws, and by the Company's then-current group health insurance policies, Employee may be eligible to continue Employee's then-current group health insurance benefits after termination of Employment. If eligible and if Employee timely elects continued health insurance coverage, in the event the Company terminates Employee's employment without Cause, or Employee resigns with Good Reason, other than in anticipation of, or on or within twenty-four (24) months after, a Change in Control then the Company shall pay, on a monthly basis, the Company's portion of any premiums necessary to provide such coverage for a period of twelve (12) months after the Employee's Separation Date; **provided, however,** that no such premium payments shall be made following the effective date of Employee's coverage by a medical, dental or vision insurance plan of a subsequent employer. Employee shall notify the Company immediately if he becomes covered by a medical, dental or vision insurance plan of a subsequent employer. Notwithstanding the foregoing, in the event the Company terminates Employee's employment without Cause, or Employee resigns with Good Reason, in anticipation of, or within twenty-four (24) months on or after, a Change in Control, then (if eligible and coverage elected) the Company shall pay, on a monthly basis, the Company's portion of any premiums necessary to provide such coverage for a period of twenty-four (24) months after the Employee's Separation Date or, if earlier, until the termination of Employee's eligibility for such COBRA or, if applicable, state insurance laws, coverage; **provided, however,** that no such premium payments shall be made following the effective date of Employee's coverage by a medical, dental or vision insurance plan of a subsequent employer and Employee agrees to immediately notify the Company of any such coverage. In the event Employee is entitled to receive such coverage for a period of twenty-four (24) months after the Employee's Separation Date but Employee's right to such COBRA or, if applicable, state insurance laws, coverage expires in the ordinary course (and other than in connection with Employee's coverage by a medical, dental or vision insurance plan of a subsequent employer or as the result of any action or inaction of Employee, such as but not limited to Employee's failure to pay Employee's portion of the premiums), then, the Company shall pay, on a monthly basis, to Employee (subject to standard deductions and withholdings) a cash payment equal to the portion of the premiums the Company was paying prior to expiration of such coverage for each month after such coverage expires through twenty-four (24) months after the Employee's Separation Date, **provided, however,** that no such cash payments shall be made following the effective date of Employee's coverage by a medical, dental or vision insurance plan of a subsequent employer and Employee agrees to immediately notify the Company of any such coverage. Notwithstanding the foregoing, Employee's receipt of any amounts under this subsection are contingent upon the release of claims described in Section 5.2, so Employee may pay such amounts during this period and the Company will reimburse such amounts as soon as administratively practicable after the effective date of the release of claims described in Section 5.2 (except as otherwise set forth above) but in no event later than the 15th day of the third month immediately following the end of the calendar year in which Employee's Separation Date occurs.

(c) Accelerated Vesting. If Employee has been employed by the Company as of the Separation Date for one full year or longer, and the Company terminates Employee's employment without Cause, or Employee resigns with Good Reason, other than in anticipation of, or on or within twenty-four (24) months after, a Change in Control, then the Company will accelerate the vesting of any equity awards granted to Employee prior to Employee's Separation Date such that twenty-five percent (25%) of all shares or options subject to such awards which are unvested as of the Employee's Separation Date shall be accelerated and deemed fully vested as of the effective date of the release of claims described in Section 5.2 (except as otherwise set forth above); **provided, however**, that in the event, and without the requirement that Employee be employed for one full year or longer, the Company terminates Employee's employment without Cause, or Employee resigns with Good Reason, in anticipation of, or within twenty-four (24) months after, a Change in Control, then the Company will accelerate the vesting of any equity awards granted to Employee prior to Employee's employment termination such that one hundred percent (100%) of all shares or options subject to such awards which are unvested as of the Employee's Separation Date shall be accelerated and deemed fully vested as of the effective date of the release of claims described in Section 5.2 (except as otherwise set forth above).

5.3 Termination for Cause; Resignation Without Good Reason. If the Company terminates Employee's employment with the Company for Cause, or Employee resigns without Good Reason, then Employee will not be entitled to any further compensation from the Company (other than accrued salary through Employee's last day of employment which will be paid in the ordinary course and any vested benefits under the Company's benefit plans in which Employee participated prior to the Separation Date in accordance with the terms of such plans), including severance pay, pay in lieu of notice or any other such compensation.

5.4 Termination Due to Death or Disability.

(a) Death. This Agreement and Employee's employment shall terminate immediately upon Employee's death and Employee's estate shall not be entitled to any further compensation from the Company (other than accrued salary through Employee's last day of employment which will be paid in the ordinary course and any vested benefits under the Company's benefit plans in which Employee participated prior to the Separation Date in accordance with the terms of such), including severance pay, pay in lieu of notice or any other such compensation.

(b) Disability. If Employee is prevented from performing his duties as described in Section 1.1 of this Agreement by reason of any physical or mental incapacity, with or without reasonable accommodation, that results in Employee's satisfaction of all requirements necessary to receive benefits under the Company's long-term disability plan due to a total disability, then, to the extent permitted by law, the Company may terminate the employment of Employee and this Agreement at such time. In such an event, and if Employee or someone authorized to act on his behalf executes and delivers the Separation Date Release described in section 5.2 and allows such release to become effective, within the timeframe set forth above, then the Company shall pay Employee severance in a single lump sum equal to twelve (12) months of Employee's Base Salary in effect on Employee's Separation Date. This severance shall be paid on the Company's first regular payroll schedule (subject to standard deductions and withholdings) after the effective date of the release of claims (or as otherwise set forth above in connection with such release as described above) but in no event later than the 15th day of the third month immediately following the end of the calendar year in which Employee's Separation Date occurs. The severance benefits provided for in this Section 5.4 shall be reduced by any amounts expected to be paid to Employee in connection with any federal or state disability insurance payments or benefits, and any private insurance disability payments or benefits, to be provided to Employee within the twelve (12) months following Employee's Separation Date.

5.5 Deferred Compensation. Notwithstanding anything to the contrary set forth herein, any payments and benefits provided under this Agreement (the "Severance Benefits") that constitute "deferred compensation" within the meaning of Section 409A of the Internal Revenue Code of 1986, as amended (the "Code") and the regulations and other guidance thereunder and any state law of similar effect (collectively "Section 409A") shall not commence in connection with Employee's termination of employment unless and until Employee has also incurred a "separation from service" (as such term is defined in Treasury Regulation Section 1.409A-1(h) ("Separation From Service"), unless the Company reasonably determines that such amounts may be provided to Employee without causing Employee to incur the additional 20% tax under Section 409A.

It is intended that each installment of the Severance Benefits payments provided for in this Agreement is a separate "payment" for purposes of Treasury Regulation Section 1.409A-2(b)(2)(i). For the avoidance of doubt, it is intended that payments of the Severance Benefits set forth in this Agreement satisfy, to the greatest extent possible, the exemptions from the application of Section 409A provided under Treasury Regulation Sections 1.409A-1(b)(4), 1.409A-1(b)(5) and 1.409A-1(b)(9).

If Employee is a "specified employee" within the meaning of 409A(a)(2)(B)(i) of the Code, no Severance Benefit payments that are nonqualified deferred compensation subject to Section 409A and are triggered by a separation from service shall be paid until the later of six (6) months after Employee's Separation Date of, if earlier, Employee's death. All such payments will be accumulated and paid within thirty (30) days after the expiration of such delay period. However, it is intended that payments to Employee will be exempt from Section 409A under the "short-term deferral" rule set forth in Section 1.409A-1(b)(4) of the Treasury Regulations and not likely to be delayed pursuant to this provision.

Notwithstanding any other payment schedule set forth in this Agreement, none of the Severance Benefits will be paid or otherwise delivered prior to the effective date of the Separation Date Release of all claims set forth as Exhibit B hereto. All amounts payable under the Agreement will be subject to standard payroll taxes and deductions. Notwithstanding any other provision of this Agreement, the Company shall not be liable to Employee or any other person if payments under this Agreement fail to be exempt from, or compliant with, Section 409A. Employee is solely responsible for the tax consequences of any payments hereunder.

5.6 Limitation on Payments. In the event that the payments or other benefits provided for in this Agreement or otherwise payable to Employee (i) constitute "parachute payments" within the meaning of Section 280G of the Code, and (ii) would be subject to the excise tax imposed by Section 4999 of the Code (the "Excise Tax"), then Employee's benefits under this Agreement shall be either (a) delivered in full, or (b) delivered to such lesser extent which would result in no portion of such benefits being subject to the Excise Tax, whichever of the foregoing amounts, taking into account the applicable federal, state and local income taxes and the Excise Tax, results in the receipt by Employee on an after-tax basis, of the greatest amount of benefits, notwithstanding that all or some portion of such benefits may be taxable under Section 4999 of the Code. If a reduction in payments or benefits constituting "parachute payments" is necessary pursuant to the foregoing provision, reduction shall occur pro rata in the following order: reduction of cash payments; cancellation of accelerated vesting of stock awards; reduction of employee benefits. If acceleration of vesting of stock award compensation is to be reduced, such acceleration of vesting shall be cancelled in the reverse order of the date of grant of the Employee's stock awards.

5.7 No Mitigation. Employee shall not be required to mitigate damages or the amount of any payment provided for under this Agreement by seeking other employment or otherwise, nor shall the amount of any payment provided for under this Agreement be reduced by any compensation earned by Employee as the result of employment by another employer after the date of termination, or otherwise, except for health insurance benefits as set forth herein.

5.8 Definitions.

(a) For purposes of this Agreement, "**Cause**" shall mean any one or more of the following:

(i) Employee's indictment or conviction of any felony or of any crime involving dishonesty;

(ii) Employee's participation in any fraud or other act of willful misconduct against the Company (including any material breach of Company policy that causes or reasonably could cause harm to the Company);

(iii) Employee's refusal to comply with any lawful directive of the Company;

(iv) Employee's material breach of Employee's fiduciary, statutory, contractual, or common law duties to the Company (including any material breach of this Agreement or the Confidential Information and Inventions Agreement); or

(v) Conduct by Employee which in the good faith and reasonable determination of the Board demonstrates gross unfitness to serve.

Provided, however, that in the event that any of the foregoing events is reasonably capable of being cured, the Company shall, within twenty (20) days after the discovery of such event, provide written notice to the Employee describing the nature of such event and Employee shall thereafter have ten (10) business days to cure such event.

(b) For purposes of this Agreement, Employee shall have "**Good Reason"** for Employee's resignation if: (w) any of the following occurs without Employee's consent; (x) Employee notifies the Company in writing, within twenty (20) days after the occurrence of one of the following events that Employee intends to terminate his employment no earlier than thirty (30) days after providing such notice; (y) the Company does not cure such condition within thirty (30) days following its receipt of such notice or states unequivocally in writing that it does not intend to attempt to cure such condition, and (z) the Employee resigns from employment within thirty (30) days following the end of the period within which the Company was entitled to remedy the condition constituting Good Reason but failed to do so:

(i) the assignment to Employee of any duties or responsibilities which result in the material diminution of Employee's authority, duties or responsibility; **provided, however,** that the acquisition of the Company and subsequent conversion of the Company to a division or unit of the acquiring corporation will not by itself result in a material diminution of Employee's authority, duties or responsibility;

(ii) a material reduction by the Company in Employee's annual base salary, except to the extent the base salaries of all other executive officers of the Company are accordingly reduced;

(iii) a relocation of Employee's place of work, or the Company's principal executive offices if Employee's principal office is at such offices, to a location that increases Employee's daily one-way commute by more than thirty-five (35) miles; or

(iv) any material breach by the Company of any material provision of this Agreement, including but not limited to Section 7.7.

(c) For purposes of this Agreement, **"Change in Control"** shall be deemed to have occurred if, in a single transaction or series of related transactions: (i) any person (as such term is used in Section 13(d) and 14(d) of the Securities Exchange Act of 1934 ("Exchange Act")), or persons acting as a group, other than a trustee or fiduciary holding securities under an employment benefit program, is or becomes a "beneficial owner" (as defined in Rule 13-3 under the Exchange Act), directly or indirectly of securities of the Company representing a majority (*e.g.*, 50% plus one share) of the combined voting power of the Company, (ii) there is a merger, consolidation or other business combination transaction of the Company with or into another corporation, entity or person, other than a transaction in which the holders of at least a majority of the shares of voting capital stock of the Company outstanding immediately prior to such transaction continue to hold (either by such shares remaining outstanding or by their being converted into shares of voting capital stock of the surviving entity) a majority of the total voting power represented by the shares of voting capital stock of the Company (or the surviving entity) outstanding immediately after such transaction, or (iii) all or substantially all of the Company's assets are sold.

6. Arbitration.

To ensure the timely and economical resolution of disputes that may arise in connection with Employee's employment with the Company, Employee and the Company agree that any and all disputes, claims, or causes of action arising from or relating to the enforcement, breach, performance, negotiation, execution, or interpretation of this Agreement, Employee's employment, or the termination of Employee's employment, shall be resolved to the fullest extent permitted by law by final, binding and confidential arbitration, by a single arbitrator, in Sacramento, California, conducted by JAMS under the then applicable JAMS rules. **By agreeing to this arbitration procedure, both Employee and the Company waive the right to resolve any such dispute through a trial by jury or judge or administrative proceeding.** The arbitrator shall: (a) have the authority to compel adequate discovery for the resolution of the dispute and to award such relief as would otherwise be permitted by law; and (b) issue a written arbitration decision, to include the arbitrator's essential findings and conclusions and a statement of the award. The arbitrator shall be authorized to award any or all remedies that Employee or the Company would be entitled to seek in a court of law. The Company shall pay all JAMS' arbitration fees in excess of the amount of court fees that would be required if the dispute were decided in a court of law. Nothing in this Agreement is intended to prevent either Employee or the Company from obtaining injunctive relief in court to prevent irreparable harm pending the conclusion of any such arbitration.

7. General Provisions.

7.1 Notices. Any notices provided hereunder must be in writing and shall be deemed effective upon the earlier of personal delivery (including personal delivery by fax) or the next day after sending by overnight carrier, to the Company at its primary office location and to Employee at his address as listed on the Company payroll.

7.2 Severability. Whenever possible, each provision of this Agreement will be interpreted in such manner as to be effective and valid under applicable law, but if any provision of this Agreement is held to be invalid, illegal or unenforceable in any respect under any applicable law or rule in any jurisdiction, such invalidity, illegality or unenforceability will not affect any other provision or any other jurisdiction, but this Agreement will be reformed, construed and enforced in such jurisdiction to the extent possible in keeping with the intent of the parties.

7.3 Waiver. Any waiver of any breach of any provisions of this Agreement must be in writing to be effective, and it shall not thereby be deemed to have waived any preceding or succeeding breach of the same or any other provision of this Agreement.

7.4 Complete Agreement. This Agreement, including Exhibit A, constitutes the entire agreement between Employee and the Company and it is the complete, final, and exclusive embodiment of their agreement with regard to this subject matter. This Agreement supersedes and replaces the Prior Agreement in its entirety and the Prior Agreement shall have no further force or effect. It is entered into without reliance on any promise or representation other than those expressly contained herein, and it cannot be modified or amended except in a writing signed by the Employee and a duly authorized officer of the Company.

7.5 Counterparts. This Agreement may be executed in separate counterparts, any one of which need not contain signatures of more than one party, but all of which taken together will constitute one and the same Agreement.

7.6 Headings. The headings of the sections hereof are inserted for convenience only and shall not be deemed to constitute a part hereof nor to affect the meaning thereof.

7.7 Successors and Assigns. This Agreement is intended to bind and inure to the benefit of and be enforceable by Employee and the Company, and their respective successors, assigns, heirs, executors and administrators, except that Employee may not assign any of his duties hereunder and he may not assign any of his rights hereunder without the written consent of the Company, which shall not be withheld unreasonably. The Company shall obtain the assumption of this Agreement by any successor or assign of the Company.

7.8 Choice of Law. All questions concerning the construction, validity and interpretation of this Agreement will be governed by the law of the State of California.

In Witness Whereof, the parties have executed this Agreement.

Pacific Ethanol, Inc.

By: /s/ Neil M. Koehler
Neil M. Koehler
President and Chief Executive Officer

Date: November 7, 2016

Understood and Agreed:

Employee

/s/ Paul P. Koehler
Paul P. Koehler

Date: November 7, 2016

Exhibit A

EMPLOYEE CONFIDENTIAL INFORMATION AND INVENTIONS ASSIGNMENT AGREEMENT

In consideration of my employment or continued employment by Pacific Ethanol, Inc. ("**Company**"), and the compensation paid to me now and during my employment with the Company, I agree to the terms of this Agreement as follows:

1. Confidential Information Protections.

1.1 Nondisclosure; Recognition of Company's Rights. At all times during and after my employment, I will hold in confidence and will not disclose, use, lecture upon, or publish any of Company's Confidential Information (defined below), except as may be required in connection with my work for Company, or as expressly authorized by the Chief Executive Officer (the "**CEO**") of Company. I will obtain the CEO's written approval before publishing or submitting for publication any material (written, oral, or otherwise) that relates to my work at Company and/or incorporates any Confidential Information. I hereby assign to Company any rights I may have or acquire in any and all Confidential Information and recognize that all Confidential Information shall be the sole and exclusive property of Company and its assigns.

1.2 Confidential Information. The term "**Confidential Information**" shall mean any and all confidential knowledge, data or information related to Company's business or its actual or demonstrably anticipated research or development, including without limitation (a) trade secrets, inventions, ideas, processes, computer source and object code, data, formulae, programs, other works of authorship, know-how, improvements, discoveries, developments, designs, and techniques; (b) information regarding products, services, plans for research and development, marketing and business plans, budgets, financial statements, contracts, prices, suppliers, and customers; (c) information regarding the skills and compensation of Company's employees, contractors, and any other service providers of Company; and (d) the existence of any business discussions, negotiations, or agreements between Company and any third party.

1.3 Third Party Information. I understand that Company has received and in the future will receive from third parties confidential or proprietary information (**"Third Party Information"**) subject to a duty on Company's part to maintain the confidentiality of such information and to use it only for certain limited purposes. During and after the term of my employment, I will hold Third Party Information in strict confidence and will not disclose to anyone (other than Company personnel who need to know such information in connection with their work for Company) or use, Third Party Information, except in connection with my work for Company or unless expressly authorized by an officer of Company in writing.

1.4 No Improper Use of Information of Prior Employers and Others. I represent that my employment by Company does not and will not breach any agreement with any former employer, including any noncompete agreement or any agreement to keep in confidence or refrain from using information acquired by me prior to my employment by Company. I further represent that I have not entered into, and will not enter into, any agreement, either written or oral, in conflict with my obligations under this Agreement. During my employment by Company, I will not improperly make use of, or disclose, any information or trade secrets of any former employer or other third party, nor will I bring onto the premises of Company or use any unpublished documents or any property belonging to any former employer or other third party, in violation of any lawful agreements with that former employer or third party. I will use in the performance of my duties only information that is generally known and used by persons with training and experience comparable to my own, is common knowledge in the industry or otherwise legally in the public domain, or is otherwise provided or developed by Company.

2. Inventions.

2.1 Inventions and Intellectual Property Rights. As used in this Agreement, the term **"Invention"** means any ideas, concepts, information, materials, processes, data, programs, know-how, improvements, discoveries, developments, designs, artwork, formulae, other copyrightable works, and techniques and all Intellectual Property Rights in any of the items listed above. The term **"Intellectual Property Rights"** means all trade secrets, copyrights, trademarks, mask work rights, patents and other intellectual property rights recognized by the laws of any jurisdiction or country.

2.2 Prior Inventions. I have disclosed on **Exhibit A** a complete list of all Inventions that (a) I have, or I have caused to be, alone or jointly with others, conceived, developed, or reduced to practice prior to the commencement of my employment by Company; (b) in which I have an ownership interest or which I have a license to use; (c) and that I wish to have excluded from the scope of this Agreement (collectively referred to as "**Prior Inventions**"). If no Prior Inventions are listed in **Exhibit A**, I warrant that there are no Prior Inventions. I agree that I will not incorporate, or permit to be incorporated, Prior Inventions in any Company Inventions (defined below) without Company's prior written consent. If, in the course of my employment with Company, I incorporate a Prior Invention into a Company process, machine or other work, I hereby grant Company a non-exclusive, perpetual, fully-paid and royalty-free, irrevocable and worldwide license, with rights to sublicense through multiple levels of sublicensees, to reproduce, make derivative works of, distribute, publicly perform, and publicly display in any form or medium, whether now known or later developed, make, have made, use, sell, import, offer for sale, and exercise any and all present or future rights in, such Prior Invention.

2.3 Assignment of Company Inventions. Inventions assigned to the Company or to a third party as directed by the Company pursuant to the section titled "Government or Third Party" are referred to in this Agreement as "**Company Inventions**." Subject to the section titled "Government or Third Party" and except for Inventions that I can prove qualify fully under the provisions of California Labor Code section 2870 and I have set forth in **Exhibit A**, I hereby assign and agree to assign in the future (when any such Inventions or Intellectual Property Rights are first reduced to practice or first fixed in a tangible medium, as applicable) to Company all my right, title, and interest in and to any and all Inventions (and all Intellectual Property Rights with respect thereto) made, conceived, reduced to practice, or learned by me, either alone or with others, during the period of my employment by Company.

2.4 Obligation to Keep Company Informed. During the period of my employment and for one (1) year after my employment ends, I will promptly and fully disclose to Company in writing (a) all Inventions authored, conceived, or reduced to practice by me, either alone or with others, including any that might be covered under California Labor Code section 2870, and (b) all patent applications filed by me or in which I am named as an inventor or co-inventor.

2.5 Government or Third Party. I agree that, as directed by the Company, I will assign to a third party, including without limitation the United States, all my right, title, and interest in and to any particular Company Invention.

2.6 Enforcement of Intellectual Property Rights and Assistance. During and after the period of my employment, I will assist Company in every proper way to obtain and enforce United States and foreign Intellectual Property Rights relating to Company Inventions in all countries. If the Company is unable to secure my signature on any document needed in connection with such purposes, I hereby irrevocably designate and appoint Company and its duly authorized officers and agents as my agent and attorney in fact, which appointment is coupled with an interest, to act on my behalf to execute and file any such documents and to do all other lawfully permitted acts to further such purposes with the same legal force and effect as if executed by me.

2.7 Incorporation of Software Code. I agree that I will not incorporate into any Company software or otherwise deliver to Company any software code licensed under the GNU General Public License or Lesser General Public License or any other license that, by its terms, requires or conditions the use or distribution of such code on the disclosure, licensing, or distribution of any source code owned or licensed by Company.

3. Records. I agree to keep and maintain adequate and current records (in the form of notes, sketches, drawings and in any other form that is required by the Company) of all Inventions made by me during the period of my employment by the Company, which records shall be available to, and remain the sole property of, the Company at all times.

4. Additional Activities. I agree that (a) during the term of my employment by Company, I will not, without Company's express written consent, engage in any employment or business activity that is competitive with, or would otherwise conflict with my employment by, Company, and (b) for the period of my employment by Company and for one (l) year thereafter, I will not, either directly or indirectly, solicit or attempt to solicit any employee, independent contractor, or consultant of Company to terminate his, her or its relationship with Company in order to become an employee, consultant, or independent contractor to or for any other person or entity.

5. Return Of Company Property. Upon termination of my employment or upon Company's request at any other time, I will deliver to Company all of Company's property, equipment, and documents, together with all copies thereof, and any other material containing or disclosing any Inventions, Third Party Information or Confidential Information and certify in writing that I have fully complied with the foregoing obligation. I agree that I will not copy, delete, or alter any information contained upon my Company computer or Company equipment before I return it to Company. In addition, if I have used any personal computer, server, or e-mail system to receive, store, review, prepare or transmit any Company information, including but not limited to, Confidential Information, I agree to provide the Company with a computer-useable copy of all such Confidential Information and then permanently delete and expunge such Confidential Information from those systems; and I agree to provide the Company access to my system as reasonably requested to verify that the necessary copying and/or deletion is completed. I further agree that any property situated on Company's premises and owned by Company is subject to inspection by Company's personnel at any time with or without notice. Prior to the termination of my employment or promptly after termination of my employment, I will cooperate with Company in attending an exit interview and certify in writing that I have complied with the requirements of this section.

6. Notification Of New Employer. If I leave the employ of Company, I consent to the notification of my new employer of my rights and obligations under this Agreement, by Company providing a copy of this Agreement or otherwise.

7. General Provisions.

7.1 Governing Law and Venue. This Agreement and any action related thereto will be governed and interpreted by and under the laws of the State of California, without giving effect to any conflicts of laws principles that require the application of the law of a different state. I expressly consent to personal jurisdiction and venue in the state and federal courts for the county in which Company's principal place of business is located for any lawsuit filed there against me by Company arising from or related to this Agreement.

7.2 Severability. If any provision of this Agreement is, for any reason, held to be invalid or unenforceable, the other provisions of this Agreement will remain enforceable and the invalid or unenforceable provision will be deemed modified so that it is valid and enforceable to the maximum extent permitted by law.

7.3 Survival. This Agreement shall survive the termination of my employment and the assignment of this Agreement by Company to any successor or other assignee and be binding upon my heirs and legal representatives.

7.4 Employment. I agree and understand that nothing in this Agreement shall give me any right to continued employment by Company, and it will not interfere in any way with my right or Company's right to terminate my employment at any time, with or without cause and with or without advance notice.

7.5 Notices. Each party must deliver all notices or other communications required or permitted under this Agreement in writing to the other party at the address listed on the signature page, by courier, by certified or registered mail (postage prepaid and return receipt requested), or by a nationally-recognized express mail service. Notice will be effective upon receipt or refusal of delivery. If delivered by certified or registered mail, notice will be considered to have been given five (5) business days after it was mailed, as evidenced by the postmark. If delivered by courier or express mail service, notice will be considered to have been given on the delivery date reflected by the courier or express mail service receipt. Each party may change its address for receipt of notice by giving notice of the change to the other party.

7.6 Injunctive Relief. I acknowledge that, because my services are personal and unique and because I will have access to the Confidential Information of Company, any breach of this Agreement by me would cause irreparable injury to Company for which monetary damages would not be an adequate remedy and, therefore, will entitle Company to injunctive relief (including specific performance). The rights and remedies provided to each party in this Agreement are cumulative and in addition to any other rights and remedies available to such party at law or in equity.

7.7 Waiver. Any waiver or failure to enforce any provision of this Agreement on one occasion will not be deemed a waiver of that provision or any other provision on any other occasion.

7.8 Export. I agree not to export, directly or indirectly, any U.S. technical data acquired from Company or any products utilizing such data, to countries outside the United States, because such export could be in violation of the United States export laws or regulations.

7.9 Entire Agreement. If no other agreement governs nondisclosure and assignment of inventions during any period in which I was previously employed or am in the future employed by Company as an independent contractor, the obligations pursuant to sections of this Agreement titled "Confidential Information Protections" and "Inventions" shall apply. This Agreement is the final, complete and exclusive agreement of the parties with respect to the subject matter hereof and supersedes and merges all prior communications between us with respect to such matters. No modification of or amendment to this Agreement, or any waiver of any rights under this Agreement, will be effective unless in writing and signed by me and the CEO of Company. Any subsequent change or changes in my duties, salary or compensation will not affect the validity or scope of this Agreement.

This Agreement shall be effective as of the first day of my employment with Company.

EMPLOYEE:

I have read, understand, and Accept this agreement and have been given the opportunity to Review it with independent legal counsel.

_____
(Signature)

By: _____

Title: _____

Date: _____

Address: _____

COMPANY:

Accepted and agreed:

_____
(Signature)

By: _____

Title: _____

Date: _____

Address: _____

EXHIBIT A

INVENTIONS

1. Prior Inventions Disclosure. The following is a complete list of all Prior Inventions (as provided in Section 2.2 of the attached Employee Confidential Information and Inventions Assignment Agreement, defined herein as the "Agreement"):

[_] None

[_] See immediately below:

_____

_____

2. Limited Exclusion Notification.

This is to notify you in accordance with Section 2872 of the California Labor Code that the foregoing Agreement between you and Company does not require you to assign or offer to assign to Company any Invention that you develop entirely on your own time without using Company's equipment, supplies, facilities or trade secret information, except for those Inventions that either:

a . Relate at the time of conception or reduction to practice to Company's business, or actual or demonstrably anticipated research or development; or

b. Result from any work performed by you for Company.

To the extent a provision in the foregoing Agreement purports to require you to assign an Invention otherwise excluded from the preceding paragraph, the provision is against the public policy of this state and is unenforceable.

This limited exclusion does not apply to any patent or Invention covered by a contract between Company and the United States or any of its agencies requiring full title to such patent or Invention to be in the United States.

Exhibit B

Separation Date Release

(To be signed and become effective on or within 60 days after the employment termination date.)

In exchange for the severance benefits to be provided to me by Pacific Ethanol, Inc. (the "Company") pursuant to the terms of my Employment Agreement (the "Agreement"), I hereby provide the following General Release of Claims (the "Release"). I understand that, on the last date of my employment with the Company, the Company will pay me any accrued salary to which I am entitled by law, regardless of whether I sign this Release, but I am not entitled to any severance benefits unless I sign and return this Release to the Company and I allow it to become effective.

I hereby generally and completely release the Company and its directors, officers, employees, shareholders, partners, agents, attorneys, predecessors, successors, parent and subsidiary entities, insurers, affiliates, and assigns (collectively the "Released Parties") of and from any and all claims, liabilities and obligations, both known and unknown, arising out of or in any way related to events, acts, conduct, or omissions occurring at any time prior to or at the time that I sign this Release.

This general release includes, but is not limited to: (1) all claims arising out of or in any way related to my employment with the Company or the termination of that employment; (2) all claims related to my compensation or benefits from the Company, including salary, incentive awards, bonuses, commissions, vacation pay, expense reimbursements, severance pay, fringe benefits, stock, stock options, or any other ownership or equity interests in the Company; (3) all claims for breach of contract, wrongful termination, and breach of the implied covenant of good faith and fair dealing (including claims based on or arising under the Agreement); (4) all tort claims, including claims for fraud, defamation, emotional distress, and discharge in violation of public policy; and (5) all federal, state, and local statutory claims, including claims for discrimination, harassment, retaliation, attorneys' fees, or other claims arising under the federal Civil Rights Act of 1964 (as amended), the federal Americans with Disabilities Act of 1990, the federal Age Discrimination in Employment Act (as amended) ("ADEA"), the federal Family and Medical Leave Act, the California Labor Code (as amended), the California Family Rights Act, and the California Fair Employment and Housing Act (as amended).

I understand that notwithstanding the foregoing, the following are not included in the Released Claims (the "Excluded Claims"): (i) any rights or claims for indemnification I may have pursuant to any written indemnification agreement to which I am a party, the charter, bylaws, or operating agreements of any of the Released Parties, or under applicable law; or (ii) any rights which are not waivable as a matter of law. In addition, I understand that nothing in this release prevents me from filing, cooperating with, or participating in any proceeding before the Equal Employment Opportunity Commission, the Department of Labor, or the California Department of Fair Employment and Housing, except that I acknowledge and agree that I shall not recover any monetary benefits in connection with any such claim, charge or proceeding with regard to any claim released herein. I hereby represent and warrant that, other than the Excluded Claims, I am not aware of any claims I have or might have against any of the Released Parties that are not included in the Released Claims.

I acknowledge that I am knowingly and voluntarily waiving and releasing any rights I may have under the ADEA, and that the consideration given for the waiver and release in the preceding paragraph is in addition to anything of value to which I am already entitled. I further acknowledge that I have been advised by this writing that: (1) my waiver and release do not apply to any rights or claims that may arise after the date I sign this Release; (2) I should consult with an attorney prior to signing this Release (although I may choose voluntarily not to do so); (3) I have forty-five (45) days to consider this Release (although I may choose voluntarily to sign it earlier); (4) I have seven (7) days following the date I sign this Release to revoke it by providing written notice of revocation to the Company's Chief Executive Officer; and (5) this Release will not be effective until the date upon which the revocation period has expired, which will be the eighth calendar day after the date I sign it provided that I do not revoke it (the "Effective Date").

I UNDERSTAND THAT THIS AGREEMENT INCLUDES A RELEASE OF ALL KNOWN AND UNKNOWN CLAIMS. I acknowledge that I have read and understand Section 1542 of the California Civil Code which reads as follows: **"A general release does not extend to claims which the creditor does not know or suspect to exist in his or her favor at the time of executing the release, which if known by him or her must have materially affected his or her settlement with the debtor."** I hereby expressly waive and relinquish all rights and benefits under that section and any law or legal principle of similar effect in any jurisdiction with respect to my release of claims herein, including but not limited to the release of unknown and unsuspected claims.

I hereby represent that I have been paid all compensation owed and for all hours worked, I have received all the leave and leave benefits and protections for which I am eligible, pursuant to the Family and Medical Leave Act, the California Family Rights Act, or otherwise, and I have not suffered any on-the-job injury for which I have not already filed a workers' compensation claim.

I further agree: (1) not to disparage the Company, its parent, or its or their officers, directors, employees, shareholders, affiliates and agents, in any manner likely to be harmful to its or their business, business reputation, or personal reputation (although I may respond accurately and fully to any question, inquiry or request for information as required by legal process); (2) not to voluntarily (except in response to legal compulsion) assist any third party in bringing or pursuing any proposed or pending litigation, arbitration, administrative claim or other formal proceeding against the Company, its parent or subsidiary entities, affiliates, officers, directors, employees or agents; and (3) to reasonably cooperate with the Company, by voluntarily (without legal compulsion) providing accurate and complete information, in connection with the Company's actual or contemplated defense, prosecution, or investigation of any claims or demands by or against third parties, or other matters, arising from events, acts, or failures to act that occurred during the period of my employment by the Company.

By: _____
Date

Pacific Ethanol, Inc.

AMENDED AND RESTATED
EMPLOYMENT AGREEMENT
for
JAMES SNEED

This Amended and Restated Employment Agreement ("Agreement") by and between James Sneed ("Employee") and Pacific Ethanol, Inc. (the "Company") (collectively, the "Parties") is effective as of the last date signed by the Parties.

Whereas, the Company desires to employ Employee to provide personal services to the Company, and wishes to provide Employee with certain compensation and benefits in return for his services;

Whereas, Employee wishes to be employed by the Company and to provide personal services to the Company in return for certain compensation and benefits;

Whereas, the Parties entered into an Employment Agreement dated November 12, 2012 (the "Prior Agreement") setting forth the terms of Employee's employment with the Company and now seek to supersede and replace the Prior Agreement with this Agreement; and

Now, Therefore, in consideration of the mutual promises and covenants contained herein, it is hereby agreed by and between the parties hereto as follows:

1. Employment by the Company.

1.1 Position. Subject to terms and conditions set forth herein, the Company agrees to employ Employee in the position of Vice President, Supply & Trading and Employee hereby accepts such employment. During the term of Employee's employment with the Company, Employee will devote Employee's best efforts and substantially all of Employee's business time and attention to the business of the Company.

1.2 Duties and Location. Employee shall perform such duties as are customarily associated with Employee's then current title. Employee's primary office location shall be a location mutually acceptable to both the Employee and the Company. The Company reserves the right to reasonably require Employee to perform Employee's duties at places other than Employee's primary office location from time to time as agreed to by Employee, and to require reasonable business travel.

1.3 Policies and Procedures. The employment relationship between the parties shall be governed by the general employment policies and practices of the Company, except that when the terms of this Agreement differ from or are in conflict with the Company's general employment policies or practices, this Agreement shall control.

2. Compensation.

2.1 Salary. For services to be rendered hereunder, Employee shall receive a bi-weekly salary of $9,444.23**,** approximately $245,550.00 on an annualized basis (the "Base Salary"), subject to standard payroll deductions and withholdings and payable in accordance with the Company's regular payroll schedule. Employee's Base Salary shall be reviewed annually and may be increased as approved by the Company's Board of Directors (the "Board") in its sole discretion.

2.2 Short Term Incentive. Employee shall be entitled to participate in the Company's Short Term Incentive plan ("STI") with a payout target of fourty percent (40%) of Employee's Base Salary. The structure of the STI from time to time, whether any STI payout will be awarded, and the amount of the STI awarded to Employee, shall be in the discretion of the Compensation Committee of the Board. Since the STI award is intended both to reward past Company and Employee performance and to provide an incentive for Employee to remain with the Company, Employee must remain an active employee through the date that any such STI award is paid in order to be entitled to receive any such award, except as otherwise provided in Section 5.2. Employee will not be paid any STI award (including a prorated award) if Employee's employment terminates for any reason before the STI is paid to him, except as otherwise provided in Section 5.2. Any earned STI shall be paid, if at all, not later than March 15th of the year following the calendar year as to which performance was measured.

2.3 Employee Benefits, Stock Options, And Incentive Compensation, And Other Compensation Plans And Programs. Employee shall be entitled to participate in such of the Company's benefit and deferred compensation plans and programs as may be made available to employees of the Company, including, without limitation, the Company's Long Term Incentive Plan, subject in each case to: (i) the generally applicable terms and conditions of the applicable plan or program and to the determinations of the Board or other person administering such plan or program, (ii) determinations by the Board or any such person as to whether and to what extent Employee shall so participate or cease to participate, and (iii) amendment, modification or termination of any such plan or program in the sole and absolute discretion of the Board. Notwithstanding the foregoing, Employee shall not be entitled to be paid any accrued but unused vacation pay that is not used in the ordinary course in accordance with the Company's vacation pay policy.

3. Confidential Information Obligations.

3.1 Confidential Information Agreement. As a condition of employment, Employee agrees to execute and abide by the Employee Confidential Information and Inventions Agreement attached hereto as Exhibit A.

3.2 Third Party Agreements and Information. Employee represents and warrants that Employee's employment by the Company will not conflict with any prior employment or consulting agreement or other agreement with any third party, and that Employee will perform Employee's duties to the Company without violating any such agreement. Employee represents and warrants that Employee does not possess confidential information arising out of prior employment, consulting, or other third party relationships, which would be used in connection with Employee's employment by the Company, except as expressly authorized by that third party. During Employee's employment by the Company, Employee will use in the performance of Employee's duties only information which is generally known and used by persons with training and experience comparable to Employee's own, common knowledge in the industry, otherwise legally in the public domain, or obtained or developed by the Company or by Employee in the course of Employee's work for the Company.

4. Outside Activities During Employment.

4.1 Non-Company Business. Except with the prior written consent of the Chief Executive Officer (in consultation with the General Counsel), Employee will not during the term of Employee's employment with the Company undertake or engage in any other employment, occupation or business enterprise, other than ones in which Employee is a passive investor. Employee may also engage in civic and not-for-profit activities so long as such activities do not materially interfere with the performance of Employee's duties hereunder.

4.2 No Adverse Interests. Employee agrees not to acquire, assume or participate in, directly or indirectly, any position, investment or interest known by him to be adverse or antagonistic to the Company, its business or prospects, financial or otherwise, except as a passive investor in mutual or exchange traded funds.

5. Termination Of Employment.

5.1 At-Will Relationship. Employee's employment relationship is at-will. Either Employee or the Company may terminate the employment relationship at any time, with or without Cause or advance notice.

5.2 Termination without Cause; Resignation for Good Reason. If, at any time, the Company terminates Employee's employment without Cause (as defined herein), or Employee resigns with Good Reason (as defined herein), and, within sixty (60) days after the Employee's Separation Date (as defined below), Employee executes and delivers the Separation Date Release of all claims set forth as Exhibit B hereto and allows such release to become effective without revoking same, then the Company will provide Employee with the following severance benefits (notwithstanding the foregoing, if any of the following severance benefits are subject to Section 409A (as defined below) and the sixty (60)-day period for executing the release and it becoming effective spans more than one calendar year, none of such severance benefits may be paid or delivered until the subsequent calendar year):

(a) Cash Severance.

(i) Qualifying Termination. Except as otherwise set forth in Section 5.2(a)(ii), in the event the Company terminates Employee's employment without Cause, or Employee resigns with Good Reason, other than in anticipation of, or on or within twenty-four (24) months after, a Change in Control (as defined below), the Company shall pay Employee severance in an amount equal to the sum of (A) twelve (12) months of Employee's Base Salary in effect on Employee's last day of employment (the "Separation Date"); and (B) 100% of the total target STI award contemplated by the Company's STI in effect on the Separation Date.

(ii) Change in Control. Notwithstanding Section 5.2(a)(i), in the event the Company terminates Employee's employment without Cause, or Employee resigns with Good Reason, in anticipation of, or on or within twenty-four (24) months after, a Change in Control, then the Company shall pay Employee severance in an amount equal to the sum of (C) twenty-four (24) months of Employee's Base Salary in effect on the Separation Date; and (D) 200% of the total target STI award contemplated by the Company's STI in effect on the Separation Date. For purposes of this Agreement, the Company will be deemed to have terminated Employee's employment, and Employee will be deemed to have resigned for Good Reason, in each case "in anticipation of" a Change in Control if Employee's employment terminates (i) prior to the Change in Control and (ii) during any period in which the Company has (A) initiated a transaction process or is engaged in substantive discussions with a third party about a specific transaction that, if consummated, would result in a Change in Control (and before the complete abandonment of such discussions without the transaction being consummated), or (B) become a party to a definitive agreement to consummate a transaction that would result in a Change in Control (and before the complete termination of such agreement without the transaction being consummated).

(iii) Payment. The cash severance shall be paid in a single lump sum as soon as administratively practicable after the effective date of the release of claims described in Section 5.2 (except as otherwise set forth above) but in no event later than the 15th day of the third month immediately following the end of the calendar year in which Employee's Separation Date occurs (subject to standard deductions and withholdings).

(b) Continued Health Insurance Coverage. To the extent provided by the federal COBRA law or, if applicable, state insurance laws, and by the Company's then-current group health insurance policies, Employee may be eligible to continue Employee's then-current group health insurance benefits after termination of Employment. If eligible and if Employee timely elects continued health insurance coverage, in the event the Company terminates Employee's employment without Cause, or Employee resigns with Good Reason, other than in anticipation of, or on or within twenty-four (24) months after, a Change in Control then the Company shall pay, on a monthly basis, the Company's portion of any premiums necessary to provide such coverage for a period of twelve (12) months after the Employee's Separation Date; **provided, however,** that no such premium payments shall be made following the effective date of Employee's coverage by a medical, dental or vision insurance plan of a subsequent employer. Employee shall notify the Company immediately if he becomes covered by a medical, dental or vision insurance plan of a subsequent employer. Notwithstanding the foregoing, in the event the Company terminates Employee's employment without Cause, or Employee resigns with Good Reason, in anticipation of, or within twenty-four (24) months on or after, a Change in Control, then (if eligible and coverage elected) the Company shall pay, on a monthly basis, the Company's portion of any premiums necessary to provide such coverage for a period of twenty-four (24) months after the Employee's Separation Date or, if earlier, until the termination of Employee's eligibility for such COBRA or, if applicable, state insurance laws, coverage; **provided, however,** that no such premium payments shall be made following the effective date of Employee's coverage by a medical, dental or vision insurance plan of a subsequent employer and Employee agrees to immediately notify the Company of any such coverage. In the event Employee is entitled to receive such coverage for a period of twenty-four (24) months after the Employee's Separation Date but Employee's right to such COBRA or, if applicable, state insurance laws, coverage expires in the ordinary course (and other than in connection with Employee's coverage by a medical, dental or vision insurance plan of a subsequent employer or as the result of any action or inaction of Employee, such as but not limited to Employee's failure to pay Employee's portion of the premiums), then, the Company shall pay, on a monthly basis, to Employee (subject to standard deductions and withholdings) a cash payment equal to the portion of the premiums the Company was paying prior to expiration of such coverage for each month after such coverage expires through twenty-four (24) months after the Employee's Separation Date, **provided, however,** that no such cash payments shall be made following the effective date of Employee's coverage by a medical, dental or vision insurance plan of a subsequent employer and Employee agrees to immediately notify the Company of any such coverage. Notwithstanding the foregoing, Employee's receipt of any amounts under this subsection are contingent upon the release of claims described in Section 5.2, so Employee may pay such amounts during this period and the Company will reimburse such amounts as soon as administratively practicable after the effective date of the release of claims described in Section 5.2 (except as otherwise set forth above) but in no event later than the 15th day of the third month immediately following the end of the calendar year in which Employee's Separation Date occurs.

(c) Accelerated Vesting. If Employee has been employed by the Company as of the Separation Date for one full year or longer, and the Company terminates Employee's employment without Cause, or Employee resigns with Good Reason, other than in anticipation of, or on or within twenty-four (24) months after, a Change in Control, then the Company will accelerate the vesting of any equity awards granted to Employee prior to Employee's Separation Date such that twenty-five percent (25%) of all shares or options subject to such awards which are unvested as of the Employee's Separation Date shall be accelerated and deemed fully vested as of the effective date of the release of claims described in Section 5.2 (except as otherwise set forth above); **provided, however**, that in the event, and without the requirement that Employee be employed for one full year or longer, the Company terminates Employee's employment without Cause, or Employee resigns with Good Reason, in anticipation of, or within twenty-four (24) months after, a Change in Control, then the Company will accelerate the vesting of any equity awards granted to Employee prior to Employee's employment termination such that one hundred percent (100%) of all shares or options subject to such awards which are unvested as of the Employee's Separation Date shall be accelerated and deemed fully vested as of the effective date of the release of claims described in Section 5.2 (except as otherwise set forth above).

5.3 Termination for Cause; Resignation Without Good Reason. If the Company terminates Employee's employment with the Company for Cause, or Employee resigns without Good Reason, then Employee will not be entitled to any further compensation from the Company (other than accrued salary through Employee's last day of employment which will be paid in the ordinary course and any vested benefits under the Company's benefit plans in which Employee participated prior to the Separation Date in accordance with the terms of such plans), including severance pay, pay in lieu of notice or any other such compensation.

5.4 Termination Due to Death or Disability.

(a) Death. This Agreement and Employee's employment shall terminate immediately upon Employee's death and Employee's estate shall not be entitled to any further compensation from the Company (other than accrued salary through Employee's last day of employment which will be paid in the ordinary course and any vested benefits under the Company's benefit plans in which Employee participated prior to the Separation Date in accordance with the terms of such), including severance pay, pay in lieu of notice or any other such compensation.

(b) Disability. If Employee is prevented from performing his duties as described in Section 1.1 of this Agreement by reason of any physical or mental incapacity, with or without reasonable accommodation, that results in Employee's satisfaction of all requirements necessary to receive benefits under the Company's long-term disability plan due to a total disability, then, to the extent permitted by law, the Company may terminate the employment of Employee and this Agreement at such time. In such an event, and if Employee or someone authorized to act on his behalf executes and delivers the Separation Date Release described in section 5.2 and allows such release to become effective, within the timeframe set forth above, then the Company shall pay Employee severance in a single lump sum equal to twelve (12) months of Employee's Base Salary in effect on Employee's Separation Date. This severance shall be paid on the Company's first regular payroll schedule (subject to standard deductions and withholdings) after the effective date of the release of claims (or as otherwise set forth above in connection with such release as described above) but in no event later than the 15th day of the third month immediately following the end of the calendar year in which Employee's Separation Date occurs. The severance benefits provided for in this Section 5.4 shall be reduced by any amounts expected to be paid to Employee in connection with any federal or state disability insurance payments or benefits, and any private insurance disability payments or benefits, to be provided to Employee within the twelve (12) months following Employee's Separation Date.

5.5 Deferred Compensation. Notwithstanding anything to the contrary set forth herein, any payments and benefits provided under this Agreement (the "Severance Benefits") that constitute "deferred compensation" within the meaning of Section 409A of the Internal Revenue Code of 1986, as amended (the "Code") and the regulations and other guidance thereunder and any state law of similar effect (collectively "Section 409A") shall not commence in connection with Employee's termination of employment unless and until Employee has also incurred a "separation from service" (as such term is defined in Treasury Regulation Section 1.409A-1(h) ("Separation From Service"), unless the Company reasonably determines that such amounts may be provided to Employee without causing Employee to incur the additional 20% tax under Section 409A.

It is intended that each installment of the Severance Benefits payments provided for in this Agreement is a separate "payment" for purposes of Treasury Regulation Section 1.409A-2(b)(2)(i). For the avoidance of doubt, it is intended that payments of the Severance Benefits set forth in this Agreement satisfy, to the greatest extent possible, the exemptions from the application of Section 409A provided under Treasury Regulation Sections 1.409A-1(b)(4), 1.409A-1(b)(5) and 1.409A-1(b)(9).

If Employee is a "specified employee" within the meaning of 409A(a)(2)(B)(i) of the Code, no Severance Benefit payments that are nonqualified deferred compensation subject to Section 409A and are triggered by a separation from service shall be paid until the later of six (6) months after Employee's Separation Date of, if earlier, Employee's death. All such payments will be accumulated and paid within thirty (30) days after the expiration of such delay period. However, it is intended that payments to Employee will be exempt from Section 409A under the "short-term deferral" rule set forth in Section 1.409A-1(b)(4) of the Treasury Regulations and not likely to be delayed pursuant to this provision.

Notwithstanding any other payment schedule set forth in this Agreement, none of the Severance Benefits will be paid or otherwise delivered prior to the effective date of the Separation Date Release of all claims set forth as Exhibit B hereto. All amounts payable under the Agreement will be subject to standard payroll taxes and deductions. Notwithstanding any other provision of this Agreement, the Company shall not be liable to Employee or any other person if payments under this Agreement fail to be exempt from, or compliant with, Section 409A. Employee is solely responsible for the tax consequences of any payments hereunder.

5.6 Limitation on Payments. In the event that the payments or other benefits provided for in this Agreement or otherwise payable to Employee (i) constitute "parachute payments" within the meaning of Section 280G of the Code, and (ii) would be subject to the excise tax imposed by Section 4999 of the Code (the "Excise Tax"), then Employee's benefits under this Agreement shall be either (a) delivered in full, or (b) delivered to such lesser extent which would result in no portion of such benefits being subject to the Excise Tax, whichever of the foregoing amounts, taking into account the applicable federal, state and local income taxes and the Excise Tax, results in the receipt by Employee on an after-tax basis, of the greatest amount of benefits, notwithstanding that all or some portion of such benefits may be taxable under Section 4999 of the Code. If a reduction in payments or benefits constituting "parachute payments" is necessary pursuant to the foregoing provision, reduction shall occur pro rata in the following order: reduction of cash payments; cancellation of accelerated vesting of stock awards; reduction of employee benefits. If acceleration of vesting of stock award compensation is to be reduced, such acceleration of vesting shall be cancelled in the reverse order of the date of grant of the Employee's stock awards.

5.7 No Mitigation. Employee shall not be required to mitigate damages or the amount of any payment provided for under this Agreement by seeking other employment or otherwise, nor shall the amount of any payment provided for under this Agreement be reduced by any compensation earned by Employee as the result of employment by another employer after the date of termination, or otherwise, except for health insurance benefits as set forth herein.

5.8 Definitions.

(a) For purposes of this Agreement, "**Cause**" shall mean any one or more of the following:

(i) Employee's indictment or conviction of any felony or of any crime involving dishonesty;

(ii) Employee's participation in any fraud or other act of willful misconduct against the Company (including any material breach of Company policy that causes or reasonably could cause harm to the Company);

(iii) Employee's refusal to comply with any lawful directive of the Company;

(iv) Employee's material breach of Employee's fiduciary, statutory, contractual, or common law duties to the Company (including any material breach of this Agreement or the Confidential Information and Inventions Agreement); or

(v) Conduct by Employee which in the good faith and reasonable determination of the Board demonstrates gross unfitness to serve.

Provided, however, that in the event that any of the foregoing events is reasonably capable of being cured, the Company shall, within twenty (20) days after the discovery of such event, provide written notice to the Employee describing the nature of such event and Employee shall thereafter have ten (10) business days to cure such event.

(b) For purposes of this Agreement, Employee shall have "**Good Reason"** for Employee's resignation if: (w) any of the following occurs without Employee's consent; (x) Employee notifies the Company in writing, within twenty (20) days after the occurrence of one of the following events that Employee intends to terminate his employment no earlier than thirty (30) days after providing such notice; (y) the Company does not cure such condition within thirty (30) days following its receipt of such notice or states unequivocally in writing that it does not intend to attempt to cure such condition, and (z) the Employee resigns from employment within thirty (30) days following the end of the period within which the Company was entitled to remedy the condition constituting Good Reason but failed to do so:

(i) the assignment to Employee of any duties or responsibilities which result in the material diminution of Employee's authority, duties or responsibility; **provided, however,** that the acquisition of the Company and subsequent conversion of the Company to a division or unit of the acquiring corporation will not by itself result in a material diminution of Employee's authority, duties or responsibility;

(ii) a material reduction by the Company in Employee's annual base salary, except to the extent the base salaries of all other executive officers of the Company are accordingly reduced;

(iii) a relocation of Employee's place of work, or the Company's principal executive offices if Employee's principal office is at such offices, to a location that increases Employee's daily one-way commute by more than thirty-five (35) miles; or

(iv) any material breach by the Company of any material provision of this Agreement, including but not limited to Section 7.7.

(c) For purposes of this Agreement, **"Change in Control"** shall be deemed to have occurred if, in a single transaction or series of related transactions: (i) any person (as such term is used in Section 13(d) and 14(d) of the Securities Exchange Act of 1934 ("Exchange Act")), or persons acting as a group, other than a trustee or fiduciary holding securities under an employment benefit program, is or becomes a "beneficial owner" (as defined in Rule 13-3 under the Exchange Act), directly or indirectly of securities of the Company representing a majority (*e.g.*, 50% plus one share) of the combined voting power of the Company, (ii) there is a merger, consolidation or other business combination transaction of the Company with or into another corporation, entity or person, other than a transaction in which the holders of at least a majority of the shares of voting capital stock of the Company outstanding immediately prior to such transaction continue to hold (either by such shares remaining outstanding or by their being converted into shares of voting capital stock of the surviving entity) a majority of the total voting power represented by the shares of voting capital stock of the Company (or the surviving entity) outstanding immediately after such transaction, or (iii) all or substantially all of the Company's assets are sold.

6. Arbitration.

To ensure the timely and economical resolution of disputes that may arise in connection with Employee's employment with the Company, Employee and the Company agree that any and all disputes, claims, or causes of action arising from or relating to the enforcement, breach, performance, negotiation, execution, or interpretation of this Agreement, Employee's employment, or the termination of Employee's employment, shall be resolved to the fullest extent permitted by law by final, binding and confidential arbitration, by a single arbitrator, in Sacramento, California, conducted by JAMS under the then applicable JAMS rules. **By agreeing to this arbitration procedure, both Employee and the Company waive the right to resolve any such dispute through a trial by jury or judge or administrative proceeding.** The arbitrator shall: (a) have the authority to compel adequate discovery for the resolution of the dispute and to award such relief as would otherwise be permitted by law; and (b) issue a written arbitration decision, to include the arbitrator's essential findings and conclusions and a statement of the award. The arbitrator shall be authorized to award any or all remedies that Employee or the Company would be entitled to seek in a court of law. The Company shall pay all JAMS' arbitration fees in excess of the amount of court fees that would be required if the dispute were decided in a court of law. Nothing in this Agreement is intended to prevent either Employee or the Company from obtaining injunctive relief in court to prevent irreparable harm pending the conclusion of any such arbitration.

7. General Provisions.

7.1 Notices. Any notices provided hereunder must be in writing and shall be deemed effective upon the earlier of personal delivery (including personal delivery by fax) or the next day after sending by overnight carrier, to the Company at its primary office location and to Employee at his address as listed on the Company payroll.

7.2 Severability. Whenever possible, each provision of this Agreement will be interpreted in such manner as to be effective and valid under applicable law, but if any provision of this Agreement is held to be invalid, illegal or unenforceable in any respect under any applicable law or rule in any jurisdiction, such invalidity, illegality or unenforceability will not affect any other provision or any other jurisdiction, but this Agreement will be reformed, construed and enforced in such jurisdiction to the extent possible in keeping with the intent of the parties.

7.3 Waiver. Any waiver of any breach of any provisions of this Agreement must be in writing to be effective, and it shall not thereby be deemed to have waived any preceding or succeeding breach of the same or any other provision of this Agreement.

7.4 Complete Agreement. This Agreement, including Exhibit A, constitutes the entire agreement between Employee and the Company and it is the complete, final, and exclusive embodiment of their agreement with regard to this subject matter. This Agreement supersedes and replaces the Prior Agreement in its entirety and the Prior Agreement shall have no further force or effect. It is entered into without reliance on any promise or representation other than those expressly contained herein, and it cannot be modified or amended except in a writing signed by the Employee and a duly authorized officer of the Company.

7.5 Counterparts. This Agreement may be executed in separate counterparts, any one of which need not contain signatures of more than one party, but all of which taken together will constitute one and the same Agreement.

7.6 Headings. The headings of the sections hereof are inserted for convenience only and shall not be deemed to constitute a part hereof nor to affect the meaning thereof.

7.7 Successors and Assigns. This Agreement is intended to bind and inure to the benefit of and be enforceable by Employee and the Company, and their respective successors, assigns, heirs, executors and administrators, except that Employee may not assign any of his duties hereunder and he may not assign any of his rights hereunder without the written consent of the Company, which shall not be withheld unreasonably. The Company shall obtain the assumption of this Agreement by any successor or assign of the Company.

7.8 Choice of Law. All questions concerning the construction, validity and interpretation of this Agreement will be governed by the law of the State of California.

In Witness Whereof, the parties have executed this Agreement.

Pacific Ethanol, Inc.

By: /s/ Neil M. Koehler
Neil M. Koehler
President and Chief Executive Officer

Date: November 7, 2016

Understood and Agreed:

Employee

/s/ James Sneed
James Sneed

Date: November 7, 2016

Exhibit A

EMPLOYEE CONFIDENTIAL INFORMATION AND INVENTIONS ASSIGNMENT AGREEMENT

In consideration of my employment or continued employment by Pacific Ethanol, Inc. ("**Company**"), and the compensation paid to me now and during my employment with the Company, I agree to the terms of this Agreement as follows:

1. Confidential Information Protections.

1.1 Nondisclosure; Recognition of Company's Rights. At all times during and after my employment, I will hold in confidence and will not disclose, use, lecture upon, or publish any of Company's Confidential Information (defined below), except as may be required in connection with my work for Company, or as expressly authorized by the Chief Executive Officer (the "**CEO**") of Company. I will obtain the CEO's written approval before publishing or submitting for publication any material (written, oral, or otherwise) that relates to my work at Company and/or incorporates any Confidential Information. I hereby assign to Company any rights I may have or acquire in any and all Confidential Information and recognize that all Confidential Information shall be the sole and exclusive property of Company and its assigns.

1.2 Confidential Information. The term "**Confidential Information**" shall mean any and all confidential knowledge, data or information related to Company's business or its actual or demonstrably anticipated research or development, including without limitation (a) trade secrets, inventions, ideas, processes, computer source and object code, data, formulae, programs, other works of authorship, know-how, improvements, discoveries, developments, designs, and techniques; (b) information regarding products, services, plans for research and development, marketing and business plans, budgets, financial statements, contracts, prices, suppliers, and customers; (c) information regarding the skills and compensation of Company's employees, contractors, and any other service providers of Company; and (d) the existence of any business discussions, negotiations, or agreements between Company and any third party.

1.3 Third Party Information. I understand that Company has received and in the future will receive from third parties confidential or proprietary information (**"Third Party Information"**) subject to a duty on Company's part to maintain the confidentiality of such information and to use it only for certain limited purposes. During and after the term of my employment, I will hold Third Party Information in strict confidence and will not disclose to anyone (other than Company personnel who need to know such information in connection with their work for Company) or use, Third Party Information, except in connection with my work for Company or unless expressly authorized by an officer of Company in writing.

1.4 No Improper Use of Information of Prior Employers and Others. I represent that my employment by Company does not and will not breach any agreement with any former employer, including any noncompete agreement or any agreement to keep in confidence or refrain from using information acquired by me prior to my employment by Company. I further represent that I have not entered into, and will not enter into, any agreement, either written or oral, in conflict with my obligations under this Agreement. During my employment by Company, I will not improperly make use of, or disclose, any information or trade secrets of any former employer or other third party, nor will I bring onto the premises of Company or use any unpublished documents or any property belonging to any former employer or other third party, in violation of any lawful agreements with that former employer or third party. I will use in the performance of my duties only information that is generally known and used by persons with training and experience comparable to my own, is common knowledge in the industry or otherwise legally in the public domain, or is otherwise provided or developed by Company.

2. Inventions.

2.1 Inventions and Intellectual Property Rights. As used in this Agreement, the term **"Invention"** means any ideas, concepts, information, materials, processes, data, programs, know-how, improvements, discoveries, developments, designs, artwork, formulae, other copyrightable works, and techniques and all Intellectual Property Rights in any of the items listed above. The term **"Intellectual Property Rights"** means all trade secrets, copyrights, trademarks, mask work rights, patents and other intellectual property rights recognized by the laws of any jurisdiction or country.

2.2 Prior Inventions. I have disclosed on **Exhibit A** a complete list of all Inventions that (a) I have, or I have caused to be, alone or jointly with others, conceived, developed, or reduced to practice prior to the commencement of my employment by Company; (b) in which I have an ownership interest or which I have a license to use; (c) and that I wish to have excluded from the scope of this Agreement (collectively referred to as "**Prior Inventions**"). If no Prior Inventions are listed in **Exhibit A**, I warrant that there are no Prior Inventions. I agree that I will not incorporate, or permit to be incorporated, Prior Inventions in any Company Inventions (defined below) without Company's prior written consent. If, in the course of my employment with Company, I incorporate a Prior Invention into a Company process, machine or other work, I hereby grant Company a non-exclusive, perpetual, fully-paid and royalty-free, irrevocable and worldwide license, with rights to sublicense through multiple levels of sublicensees, to reproduce, make derivative works of, distribute, publicly perform, and publicly display in any form or medium, whether now known or later developed, make, have made, use, sell, import, offer for sale, and exercise any and all present or future rights in, such Prior Invention.

2.3 Assignment of Company Inventions. Inventions assigned to the Company or to a third party as directed by the Company pursuant to the section titled "Government or Third Party" are referred to in this Agreement as "**Company Inventions**." Subject to the section titled "Government or Third Party" and except for Inventions that I can prove qualify fully under the provisions of California Labor Code section 2870 and I have set forth in **Exhibit A**, I hereby assign and agree to assign in the future (when any such Inventions or Intellectual Property Rights are first reduced to practice or first fixed in a tangible medium, as applicable) to Company all my right, title, and interest in and to any and all Inventions (and all Intellectual Property Rights with respect thereto) made, conceived, reduced to practice, or learned by me, either alone or with others, during the period of my employment by Company.

2.4 Obligation to Keep Company Informed. During the period of my employment and for one (1) year after my employment ends, I will promptly and fully disclose to Company in writing (a) all Inventions authored, conceived, or reduced to practice by me, either alone or with others, including any that might be covered under California Labor Code section 2870, and (b) all patent applications filed by me or in which I am named as an inventor or co-inventor.

2.5 Government or Third Party. I agree that, as directed by the Company, I will assign to a third party, including without limitation the United States, all my right, title, and interest in and to any particular Company Invention.

2.6 Enforcement of Intellectual Property Rights and Assistance. During and after the period of my employment, I will assist Company in every proper way to obtain and enforce United States and foreign Intellectual Property Rights relating to Company Inventions in all countries. If the Company is unable to secure my signature on any document needed in connection with such purposes, I hereby irrevocably designate and appoint Company and its duly authorized officers and agents as my agent and attorney in fact, which appointment is coupled with an interest, to act on my behalf to execute and file any such documents and to do all other lawfully permitted acts to further such purposes with the same legal force and effect as if executed by me.

2.7 Incorporation of Software Code. I agree that I will not incorporate into any Company software or otherwise deliver to Company any software code licensed under the GNU General Public License or Lesser General Public License or any other license that, by its terms, requires or conditions the use or distribution of such code on the disclosure, licensing, or distribution of any source code owned or licensed by Company.

3. Records. I agree to keep and maintain adequate and current records (in the form of notes, sketches, drawings and in any other form that is required by the Company) of all Inventions made by me during the period of my employment by the Company, which records shall be available to, and remain the sole property of, the Company at all times.

4. Additional Activities. I agree that (a) during the term of my employment by Company, I will not, without Company's express written consent, engage in any employment or business activity that is competitive with, or would otherwise conflict with my employment by, Company, and (b) for the period of my employment by Company and for one (l) year thereafter, I will not, either directly or indirectly, solicit or attempt to solicit any employee, independent contractor, or consultant of Company to terminate his, her or its relationship with Company in order to become an employee, consultant, or independent contractor to or for any other person or entity.

5. Return Of Company Property. Upon termination of my employment or upon Company's request at any other time, I will deliver to Company all of Company's property, equipment, and documents, together with all copies thereof, and any other material containing or disclosing any Inventions, Third Party Information or Confidential Information and certify in writing that I have fully complied with the foregoing obligation. I agree that I will not copy, delete, or alter any information contained upon my Company computer or Company equipment before I return it to Company. In addition, if I have used any personal computer, server, or e-mail system to receive, store, review, prepare or transmit any Company information, including but not limited to, Confidential Information, I agree to provide the Company with a computer-useable copy of all such Confidential Information and then permanently delete and expunge such Confidential Information from those systems; and I agree to provide the Company access to my system as reasonably requested to verify that the necessary copying and/or deletion is completed. I further agree that any property situated on Company's premises and owned by Company is subject to inspection by Company's personnel at any time with or without notice. Prior to the termination of my employment or promptly after termination of my employment, I will cooperate with Company in attending an exit interview and certify in writing that I have complied with the requirements of this section.

6. Notification Of New Employer. If I leave the employ of Company, I consent to the notification of my new employer of my rights and obligations under this Agreement, by Company providing a copy of this Agreement or otherwise.

7. General Provisions.

7.1 Governing Law and Venue. This Agreement and any action related thereto will be governed and interpreted by and under the laws of the State of California, without giving effect to any conflicts of laws principles that require the application of the law of a different state. I expressly consent to personal jurisdiction and venue in the state and federal courts for the county in which Company's principal place of business is located for any lawsuit filed there against me by Company arising from or related to this Agreement.

7.2 Severability. If any provision of this Agreement is, for any reason, held to be invalid or unenforceable, the other provisions of this Agreement will remain enforceable and the invalid or unenforceable provision will be deemed modified so that it is valid and enforceable to the maximum extent permitted by law.

7.3 Survival. This Agreement shall survive the termination of my employment and the assignment of this Agreement by Company to any successor or other assignee and be binding upon my heirs and legal representatives.

7.4 Employment. I agree and understand that nothing in this Agreement shall give me any right to continued employment by Company, and it will not interfere in any way with my right or Company's right to terminate my employment at any time, with or without cause and with or without advance notice.

7.5 Notices. Each party must deliver all notices or other communications required or permitted under this Agreement in writing to the other party at the address listed on the signature page, by courier, by certified or registered mail (postage prepaid and return receipt requested), or by a nationally-recognized express mail service. Notice will be effective upon receipt or refusal of delivery. If delivered by certified or registered mail, notice will be considered to have been given five (5) business days after it was mailed, as evidenced by the postmark. If delivered by courier or express mail service, notice will be considered to have been given on the delivery date reflected by the courier or express mail service receipt. Each party may change its address for receipt of notice by giving notice of the change to the other party.

7.6 Injunctive Relief. I acknowledge that, because my services are personal and unique and because I will have access to the Confidential Information of Company, any breach of this Agreement by me would cause irreparable injury to Company for which monetary damages would not be an adequate remedy and, therefore, will entitle Company to injunctive relief (including specific performance). The rights and remedies provided to each party in this Agreement are cumulative and in addition to any other rights and remedies available to such party at law or in equity.

7.7 Waiver. Any waiver or failure to enforce any provision of this Agreement on one occasion will not be deemed a waiver of that provision or any other provision on any other occasion.

7.8 Export. I agree not to export, directly or indirectly, any U.S. technical data acquired from Company or any products utilizing such data, to countries outside the United States, because such export could be in violation of the United States export laws or regulations.

7.9 Entire Agreement. If no other agreement governs nondisclosure and assignment of inventions during any period in which I was previously employed or am in the future employed by Company as an independent contractor, the obligations pursuant to sections of this Agreement titled "Confidential Information Protections" and "Inventions" shall apply. This Agreement is the final, complete and exclusive agreement of the parties with respect to the subject matter hereof and supersedes and merges all prior communications between us with respect to such matters. No modification of or amendment to this Agreement, or any waiver of any rights under this Agreement, will be effective unless in writing and signed by me and the CEO of Company. Any subsequent change or changes in my duties, salary or compensation will not affect the validity or scope of this Agreement.

This Agreement shall be effective as of the first day of my employment with Company.

EMPLOYEE:

I have read, understand, and Accept this agreement and have been given the opportunity to Review it with independent legal counsel.

_____
(Signature)

By: _____

Title: _____

Date: _____

Address: _____

COMPANY:

Accepted and agreed:

_____
(Signature)

By: _____

Title: _____

Date: _____

Address: _____

EXHIBIT A

INVENTIONS

1. Prior Inventions Disclosure. The following is a complete list of all Prior Inventions (as provided in Section 2.2 of the attached Employee Confidential Information and Inventions Assignment Agreement, defined herein as the "Agreement"):

[_] None

[_] See immediately below:

_____

_____

2. Limited Exclusion Notification.

This is to notify you in accordance with Section 2872 of the California Labor Code that the foregoing Agreement between you and Company does not require you to assign or offer to assign to Company any Invention that you develop entirely on your own time without using Company's equipment, supplies, facilities or trade secret information, except for those Inventions that either:

a . Relate at the time of conception or reduction to practice to Company's business, or actual or demonstrably anticipated research or development; or

b. Result from any work performed by you for Company.

To the extent a provision in the foregoing Agreement purports to require you to assign an Invention otherwise excluded from the preceding paragraph, the provision is against the public policy of this state and is unenforceable.

This limited exclusion does not apply to any patent or Invention covered by a contract between Company and the United States or any of its agencies requiring full title to such patent or Invention to be in the United States.

Exhibit B

Separation Date Release

(To be signed and become effective on or within 60 days after the employment termination date.)

In exchange for the severance benefits to be provided to me by Pacific Ethanol, Inc. (the "Company") pursuant to the terms of my Employment Agreement (the "Agreement"), I hereby provide the following General Release of Claims (the "Release"). I understand that, on the last date of my employment with the Company, the Company will pay me any accrued salary to which I am entitled by law, regardless of whether I sign this Release, but I am not entitled to any severance benefits unless I sign and return this Release to the Company and I allow it to become effective.

I hereby generally and completely release the Company and its directors, officers, employees, shareholders, partners, agents, attorneys, predecessors, successors, parent and subsidiary entities, insurers, affiliates, and assigns (collectively the "Released Parties") of and from any and all claims, liabilities and obligations, both known and unknown, arising out of or in any way related to events, acts, conduct, or omissions occurring at any time prior to or at the time that I sign this Release.

This general release includes, but is not limited to: (1) all claims arising out of or in any way related to my employment with the Company or the termination of that employment; (2) all claims related to my compensation or benefits from the Company, including salary, incentive awards, bonuses, commissions, vacation pay, expense reimbursements, severance pay, fringe benefits, stock, stock options, or any other ownership or equity interests in the Company; (3) all claims for breach of contract, wrongful termination, and breach of the implied covenant of good faith and fair dealing (including claims based on or arising under the Agreement); (4) all tort claims, including claims for fraud, defamation, emotional distress, and discharge in violation of public policy; and (5) all federal, state, and local statutory claims, including claims for discrimination, harassment, retaliation, attorneys' fees, or other claims arising under the federal Civil Rights Act of 1964 (as amended), the federal Americans with Disabilities Act of 1990, the federal Age Discrimination in Employment Act (as amended) ("ADEA"), the federal Family and Medical Leave Act, the California Labor Code (as amended), the California Family Rights Act, and the California Fair Employment and Housing Act (as amended).

I understand that notwithstanding the foregoing, the following are not included in the Released Claims (the "Excluded Claims"): (i) any rights or claims for indemnification I may have pursuant to any written indemnification agreement to which I am a party, the charter, bylaws, or operating agreements of any of the Released Parties, or under applicable law; or (ii) any rights which are not waivable as a matter of law. In addition, I understand that nothing in this release prevents me from filing, cooperating with, or participating in any proceeding before the Equal Employment Opportunity Commission, the Department of Labor, or the California Department of Fair Employment and Housing, except that I acknowledge and agree that I shall not recover any monetary benefits in connection with any such claim, charge or proceeding with regard to any claim released herein. I hereby represent and warrant that, other than the Excluded Claims, I am not aware of any claims I have or might have against any of the Released Parties that are not included in the Released Claims.

I acknowledge that I am knowingly and voluntarily waiving and releasing any rights I may have under the ADEA, and that the consideration given for the waiver and release in the preceding paragraph is in addition to anything of value to which I am already entitled. I further acknowledge that I have been advised by this writing that: (1) my waiver and release do not apply to any rights or claims that may arise after the date I sign this Release; (2) I should consult with an attorney prior to signing this Release (although I may choose voluntarily not to do so); (3) I have forty-five (45) days to consider this Release (although I may choose voluntarily to sign it earlier); (4) I have seven (7) days following the date I sign this Release to revoke it by providing written notice of revocation to the Company's Chief Executive Officer; and (5) this Release will not be effective until the date upon which the revocation period has expired, which will be the eighth calendar day after the date I sign it provided that I do not revoke it (the "Effective Date").

I UNDERSTAND THAT THIS AGREEMENT INCLUDES A RELEASE OF ALL KNOWN AND UNKNOWN CLAIMS. I acknowledge that I have read and understand Section 1542 of the California Civil Code which reads as follows: **"A general release does not extend to claims which the creditor does not know or suspect to exist in his or her favor at the time of executing the release, which if known by him or her must have materially affected his or her settlement with the debtor."** I hereby expressly waive and relinquish all rights and benefits under that section and any law or legal principle of similar effect in any jurisdiction with respect to my release of claims herein, including but not limited to the release of unknown and unsuspected claims.

I hereby represent that I have been paid all compensation owed and for all hours worked, I have received all the leave and leave benefits and protections for which I am eligible, pursuant to the Family and Medical Leave Act, the California Family Rights Act, or otherwise, and I have not suffered any on-the-job injury for which I have not already filed a workers' compensation claim.

I further agree: (1) not to disparage the Company, its parent, or its or their officers, directors, employees, shareholders, affiliates and agents, in any manner likely to be harmful to its or their business, business reputation, or personal reputation (although I may respond accurately and fully to any question, inquiry or request for information as required by legal process); (2) not to voluntarily (except in response to legal compulsion) assist any third party in bringing or pursuing any proposed or pending litigation, arbitration, administrative claim or other formal proceeding against the Company, its parent or subsidiary entities, affiliates, officers, directors, employees or agents; and (3) to reasonably cooperate with the Company, by voluntarily (without legal compulsion) providing accurate and complete information, in connection with the Company's actual or contemplated defense, prosecution, or investigation of any claims or demands by or against third parties, or other matters, arising from events, acts, or failures to act that occurred during the period of my employment by the Company.

By: _____
Date

Exhibit 10.13

Pacific Ethanol, Inc. 2016 Short-Term Incentive Plan ("Plan") Description

- Effective Date: The Plan was adopted by the compensation committee (the "Compensation Committee") of the board of directors of Pacific Ethanol, Inc. (the "Company") on March 16, 2016.

- Participants: The Company's Chief Executive Officer, Chief Financial Officer, Chief Operating Officer, General Counsel, Vice President of Commodities and Corporate Development and Vice President of Ethanol Supply and Marketing, ("Executive Officers"), and other officer, director and manager-level personnel will be eligible to participate in the Plan.

- Aggregate Plan Pool: The dollar amount of the aggregate Plan pool will be established by the Compensation Committee.

- Awards: Awards under the Plan for Executive Officers will be determined by the Compensation Committee. Awards under the Plan for other officer, director and manager-level personnel will be determined by the Company's executive committee, within the limits of the Plan pool approved by the Compensation Committee.

- Individual Targets: The Plan payout targets for Executive Officers will be determined by the Compensation Committee. The Plan payout targets for other officer, director and manager-level personnel will be set as a percentage of a participant's base salary in accordance with compensation policies established by the Company's executive committee or a participant's employment agreement with the Company.

- Award Components: Awards under the Plan will be based on two elements: financial performance, and individual performance. Company financial performance will be an element in all participants' awards. Each element will be assigned a weighting based upon a participant's role in the Company.

    - The financial performance element will be based on an earnings before interest, taxes, debt extinguishments, fair value adjustments, warrant inducements and depreciation and amortization ("Adjusted EBITDA") goal established by the Compensation Committee. The financial performance element is non-discretionary and will be funded at a rate of 0% to 200% of the participant's targeted payout amount for the element based on the level of actual Adjusted EBITDA compared to the Adjusted EBITDA goal.

    - The individual performance element will be based on individual participant goals based on quantitative criteria and subjective elements established by each participant's supervisor, in consultation with the Company's executive committee. The extent to which a participant will be deemed to have achieved his or her individual performance goals will be determined by the Company's executive committee in consultation with the participant's supervisor; provided, however, that the extent to which a participant who is an Executive Officer will be deemed to have achieved his or her individual performance goals will be recommended by the Company's Chief Executive Officer but ultimately determined by the Compensation Committee. The individual performance element is discretionary and will be funded at a rate of 0% to 100% of the participant's targeted payout amount for the element.

AMENDMENT NO. 6
TO
AMENDED AND RESTATED LOAN AND SECURITY AGREEMENT

This AMENDMENT NO. 6 TO AMENDED AND RESTATED LOAN AND SECURITY AGREEMENT (this " **Amendment**") is entered into as of May 23, 2016, by and among WELLS FARGO CAPITAL FINANCE, LLC, in its capacity as agent (in such capacity, "**Agent**") for the Lenders (as defined in the Loan Agreement referred to below), KINERGY MARKETING LLC ("**Kinergy**"), and PACIFIC AG. PRODUCTS, LLC (" **Pacific Ag** " and together with Kinergy, each individually, a "**Borrower**" and collectively, the "**Borrowers**").

WHEREAS, Borrowers, Agent and Lenders have entered into certain financing arrangements as set forth in (a) the Amended and Restated Loan and Security Agreement, dated as of May 4, 2012, by and among Agent, Lenders and Borrowers (as amended, restated, renewed, extended, supplemented, substituted and otherwise modified from time to time, the "**Loan Agreement** ") and (b) the Financing Agreements (as defined in the Loan Agreement); and

WHEREAS, Borrowers, Agent and Lenders have agreed to amend and modify certain provisions of Loan Agreement, subject to the terms and conditions of this Amendment.

NOW, THEREFORE, upon the mutual agreements and covenants set forth herein and for other good and valuable consideration, the receipt and sufficiency of which are hereby acknowledged, the parties hereto agree as follows:

1. Definitions.

(a) Additional Definitions. The Loan Agreement is hereby amended to add the following new definitions thereto:

""Amendment No. 6" shall mean Amendment No. 6 to Amended and Restated Loan and Security Agreement, dated as of May 23, 2016."

""FILO Availability" means, as of any date of determination, an amount equal to the lesser of (a) the FILO Limit or (b) the sum of (i) five percent (5%) of the Eligible Accounts of Borrowers, plus (ii) the lesser of (A) fifteen percent (15%) of the Value of the Eligible Inventory and Eligible-In Transit Inventory of Borrowers consisting of commodities for which mark to market pricing is published or reported by the Los Angeles Oil Price Information Service (commonly known as OPIS) and/or the Chicago Board of Trade (commonly known as CBOT) or (B) ten percent (10%) of the Net Recovery Percentage multiplied by the Value of Eligible Inventory and Eligible In-Transit Inventory of Borrowers."

""FILO Limit" means $7,500,000; provided that (a) on each annual anniversary date of this Agreement, commencing May 4, 2017, the FILO Limit shall be reduced by $2,500,000, and (b) unless sooner reduced in accordance with the foregoing, the FILO Limit shall be reduced to zero (0) on the 90th day prior to the maturity or termination date of the Aventine Term Loan Agreement."

""FILO Loans" means, as of any date of determination, that portion of the principal amount of Revolving Loans outstanding equal to the FILO Availability (or, if such principal amount of Revolving Loans outstanding is less than the FILO Availability, such lesser amount).

(b) Interpretation. Capitalized terms used and not defined in this Amendment shall have the respective meanings given them in the Loan Agreement.

2. Amendments.

(a) Inventory Advance Rate . The definition of "Applicable Inventory Advance Rate" set forth in Section 1 of the Loan Agreement is hereby deleted in its entirety.

(b) Applicable Margin. Subsection (a) of Section 1.6 of the Loan Agreement is hereby deleted in its entirety and the following substituted therefor:

"(a) Subject to clause (b) below, at any time, as to the Interest Rate for all Loans, the applicable percentage (on a per annum basis) set forth below if the Quarterly Average Excess Availability is at or within the amounts indicated for such percentage:

Tier	Quarterly Average Excess Availability	Applicable Margin for Revolving Loans other than FILO Loans	Applicable Margin for FILO Loans
1	Greater than an amount equal to 25% of the Maximum Credit	1.75%	2.25%
2.	Less than or equal to an amount equal to 25% of the Maximum Credit and greater than an amount equal to 10% of the Maximum Credit	2.25%	2.75%
3	Less than or equal to an amount equal to 10% of the Maximum Credit	2.75%	3.25%

(c) Borrowing Base. Subsection (a) of Section 1.13 of the Loan Agreement is hereby deleted in its entirety and the following substituted therefor:

"(a) the sum of:

(i) eighty-five percent (85%) of the Eligible Accounts of Borrowers; plus

(ii) the lesser of (A) the Inventory Loan Limit, (B) seventy percent (70%) multiplied by the Value of the Eligible Inventory and Eligible-In-Transit Inventory of Borrowers, or (C) eighty-five percent (85%) of the Net Recovery Percentage multiplied by the Value of Eligible Inventory and Eligible In Transit Inventory of Borrowers; plus

(iii) FILO Availability (which, for the avoidance of doubt but without limiting Section 2.1(b) of this Agreement, is in addition to amounts available under clauses (i) and (ii) above); minus"

(d) Interest Rate. Subsection (b) of Section 1.68 of the Loan Agreement is hereby deleted in its entirety and the following substituted therefor:

"(b) Notwithstanding anything to the contrary contained in clause (a) of this definition, the Applicable Margin otherwise used to calculate the Interest Rate shall, with respect to each category of Revolving Loans, be the highest percentage set forth in the definition of the term Applicable Margin for such category of Revolving Loans plus two (2%) percent per annum, at Agent's option, without notice, (i) either (A) for the period on and after the date of termination or non-renewal hereof until such time as all Obligations are indefeasibly paid and satisfied in full in immediately available funds, or (B) for the period from and after the date of the occurrence of any Event of Default, and for so long as such Event of Default is continuing as determined by Agent and (ii) on the Revolving Loans to Borrowers at any time outstanding in excess of the Borrowing Base (whether or not such excess(es) arise or are made with or without Agent's or any Lender's knowledge or consent and whether made before or after an Event of Default)."

(e) Eligible Accounts.

(i) Subsection (b) of Section 1.33 of the Loan Agreement is hereby deleted in its entirety and the following substituted therefor:

"(b) intentionally omitted."

(ii) Subsection (n) of Section 1.33 of the Loan Agreement is hereby deleted in its entirety and the following substituted therefor:

"(n) such Accounts are not unpaid more than the earlier of (i) in the case of Accounts of Pacific AG with payment terms of thirty (30) or more days, thirty (30) days after the original due date for such Accounts or ninety (90) days after the date of the original invoice for them, and (ii) in the case of all other Accounts, thirty (30) days after the original due date for such Accounts or forty-five (45) days after the date of the original invoice for them."

(f) Concentration Limits. Subsections (i) and (ii) of Section 1.33(m) of the Loan Agreement are hereby deleted in their entirety and the following substituted therefor:

"(i) with respect to any Borrower, the aggregate amount of such Accounts of such Borrower owing by a single account debtor (other than Royal Dutch Shell plc, Idemitsu Apollo Corporation, Maverik, Inc., Valero Energy Corporation, Tesoro Corporation, ConocoPhillips Company, Chevron Corporation and Vitol, Inc.) do not constitute more than twenty (20%) percent of the aggregate amount of all otherwise Eligible Accounts, (ii) with respect to any Borrower, the aggregate amount of such Accounts of such Borrower owing by any of Sinclair, Idemitsu Apollo Corporation, Maverik, Inc. or Vitol, Inc. do not, in each case, constitute more than twenty-five (25%) percent of the aggregate amount of all otherwise Eligible Accounts,"

(g) FILO Loans. The Loan Agreement is hereby amended to add the following new Section 2.1(d):

"(d) Notwithstanding anything to the contrary contained herein or in any other Financing Agreement, FILO Loans shall be deemed to be the first Revolving Loans made and the last Revolving Loans repaid or prepaid, such that FILO Loans shall be on a "first in-last-out" basis; provided that, notwithstanding anything to the contrary herein, if at any time the aggregate amount of FILO Loans outstanding exceeds the FILO Availability, the FILO Loans shall be repaid prior to other Loans up the amount required to cause the aggregate amount of FILO Loans outstanding to no longer exceed the FILO Availability. Except in Agent's discretion, with the consent of all Lenders or as otherwise provided herein, the aggregate amount of FILO Loans outstanding at any time shall not exceed the FILO Availability. In the event that the aggregate amount of FILO Loans outstanding exceeds the FILO Availability, Borrowers shall, upon demand by Agent made at any time or from time to time, immediately repay to Agent the entire amount of any such excess(es) for which payment is demanded."

(h) Payments. Subsection (a) of Section 6.4 of the Loan Agreement is hereby deleted in its entirety and the following substituted therefor:

"(a) All Obligations shall be payable to the Agent Payment Account as provided in Section 6.3 or such other place as Agent may designate from time to time. Subject to the other terms and conditions contained herein, Agent shall apply payments received or collected from any Borrower or any Guarantor or for the account of any Borrower or any Guarantor (including the monetary proceeds of collections or of realization upon any Collateral) as follows: first, to pay any fees, indemnities or expense reimbursements then due to Agent, Lenders and Issuing Bank from any Borrower or any Guarantor; second, to pay interest due in respect of any Loans (and including any Special Agent Advances) or Letter of Credit Obligations; third, to pay or prepay principal in respect of Special Agent Advances; fourth, to pay principal due in respect of the Loans (other than FILO Loans) and to pay Obligations then due arising under or pursuant to any Hedge Agreements of a Borrower or a Guarantor with Agent or a Bank Product Provider (up to the amount of any then effective Reserve established in respect of such Obligations), on a pro rata basis; fifth, to pay principal due in respect of the FILO Loans, sixth, to pay or prepay any other Obligations whether or not then due, in such order and manner as Agent determines and at any time an Event of Default exists or has occurred and is continuing, to provide cash collateral for any Letter of Credit Obligations or other contingent Obligations (but not including for this purpose any Obligations arising under or pursuant to any Bank Products); and seventh, to pay or prepay any Obligations arising under or pursuant to any Bank Products (other than to the extent provided for above) on a pro rata basis, Notwithstanding anything to the contrary contained in this Agreement, to the extent any Borrower uses any proceeds of the Loans or Letters of Credit to acquire rights in or the use of any Collateral or to repay any Indebtedness used to acquire rights in or the use of any Collateral, payments in respect of the Obligations shall be deemed applied first to the Obligations arising from Loans and Letters of Credit that were not used for such purposes and second to the Obligations arising from Loans and Letters of Credit the proceeds of which were used to acquire rights in or the use of any Collateral in the chronological order in which such Borrower acquired such rights in or the use of such Collateral."

(i) Audited Financial Statements. Section 9.6(a)(iii) of the Loan Agreement is hereby amended by deleting ", and" at the end thereof and substituting the following therefor:

"; notwithstanding the foregoing, the due date for such audited financial statements for the fiscal year ending December 31, 2015 shall be May 31, 2016, and"

(j) Collateral Reporting. Notwithstanding the amount of Excess Availability reflected in a Borrowing Base Certificate delivered by Borrowers to Agent at any time prior to the date hereof, Agent and Lenders (i) agree that an Increased Reporting Period is not now in effect and (ii) waive any right to an Increased Reporting Period under Section 7.1(a)(i) based solely on the amount of Excess Availability reflected in a Borrowing Base Certificate delivered by Borrowers to Agent at any time prior to the date hereof.

3 . Additional Representation. In addition to the continuing representations, warranties and covenants at any time made by Borrowers to Agent and Lenders pursuant to the Loan Agreement and the other Financing Agreements, Borrowers hereby jointly and severally represent, warrant and covenant with and to Agent and Lenders that, (a) as of the date of this Amendment and after giving effect hereto, no Default or Event of Default exists or has occurred and is continuing and (b) Borrowers have provided to Agent true and complete copies of the Aventine Term Loan Agreement and Term Loan Intercreditor Agreement, in each case, as in effect as of the date hereof.

4 . Release. In consideration of the agreements of Agent and Lenders contained herein and the making of loans by or on behalf of Agent and Lenders to Borrowers pursuant to the Loan Agreement, and for other good and valuable consideration, the receipt and sufficiency of which is hereby acknowledged, each Borrower and Parent on behalf of itself and its successors, assigns, and other legal representatives, hereby, jointly and severally, absolutely, unconditionally and irrevocably releases, remises and forever discharges Agent and each Lender, and their present and former shareholders, affiliates, subsidiaries, divisions, predecessors, directors, officers, attorneys, employees, agents and other representatives and their respective successors and assigns (Agent, each Lender and all such other parties being hereinafter referred to collectively as the "**Releasees**" and individually as a "**Releasee**"), of and from all demands, actions, causes of action, suits, covenants, contracts, controversies, agreements, promises, sums of money, accounts, bills, reckonings, damages and any and all other claims, counterclaims, defenses, rights of set-off, demands and liabilities whatsoever (individually, a "**Claim**" and collectively, "**Claims**") of every name and nature, known or unknown, suspected or unsuspected, both at law and in equity, whether liquidated or unliquidated, matured or unmatured, asserted or unasserted, fixed or contingent, foreseen or unforeseen and anticipated or unanticipated, which any Borrower or Parent, or any of its successors, assigns, or other legal representatives and its successors and assigns may now or hereafter own, hold, have or claim to have against the Releasees or any of them for, upon, or by reason of any nature, cause or thing whatsoever which arises at any time on or prior to the day and date of this Agreement, in relation to, or in any way in connection with the Loan Agreement, as amended and supplemented through the date hereof, this Agreement and the other Financing Agreements. Each Borrower and Parent understands, acknowledges and agrees that the release set forth above may be pleaded as a full and complete defense and may be used as a basis for an injunction against any action, suit or other proceeding which may be instituted, prosecuted or attempted in breach of the provisions of such release.

5. Amendment Fee. In addition to all other fees, costs and expenses payable by Borrowers to Agent and Lenders under the Financing Agreements, Borrowers shall pay to Agent, for the ratable benefit of Lenders, an amendment fee in the amount of $37,500 (the "**Amendment Fee**")**.** The Amendment Fee shall be fully earned, due and payable on the date hereof, and shall not be subject to refund or rebate for any reason.

6. Conditions to Effectiveness. The effectiveness of this Amendment shall be subject to the receipt by Agent of an original (or electronic copy) of this Amendment duly authorized, executed and delivered by Borrowers and Lenders.

7. Effect of this Amendment. Except as modified pursuant hereto, no other changes or modifications to the Loan Agreement or the other Financing Agreements are intended or implied and in all other respects the Loan Agreement and other Financing Agreements are hereby specifically ratified, restated and confirmed by all parties hereto as of the date hereof. To the extent of conflict between the terms of this Amendment, on the one hand, and Loan Agreement or the other Financing Agreements, on the other hand, the terms of this Amendment shall control.

8. Further Assurances. Borrowers shall execute and deliver such additional documents and take such additional action as may be reasonably requested by Agent to effectuate the provisions and purposes of this Amendment.

9. Binding Effect. This Amendment shall be binding upon and inure to the benefit of each of the parties hereto and their respective successors and assigns.

10. Governing Law. The rights and obligations hereunder of each of the parties hereto shall be governed by and interpreted and determined in accordance with the internal laws of the State of California (without giving effect to principles of conflict of laws).

11. Counterparts. This Amendment may be signed in counterparts, each of which shall be an original and all of which taken together constitute one agreement. In making proof of this Amendment, it shall not be necessary to produce or account for more than one counterpart signed by the party to be charged, Delivery of an executed counterpart of this Amendment electronically or by facsimile shall be effective as delivery of an original executed counterpart of this Amendment.

[REMAINDER OF PAGE INTENTIONALLY LEFT BLANK]

IN WITNESS WHEREOF, the parties hereto have caused this Amendment to be duly executed and delivered by their authorized officers as of the day and year first above written.

BORROWERS:

KINERGY MARKETING LLC,
as a Borrower

By: /s/ Bryon T. McGregor
Name: Bryon T. McGregor
Title: CFO

PACIFIC AG. PRODUCTS, LLC,
as a Borrower

By: /s/ Bryon T. McGregor
Name: Bryon T. McGregor
Title: CFO

ACKNOWLEDGED AND AGREED:

PACIFIC ETHANOL, INC,
as Parent

By: /s/ Bryon T. McGregor
Name: Bryon T. McGregor
Title: CFO

AGENT AND LENDER:

WELLS FARGO CAPITAL FINANCE, LLC,
as Agent and sole Lender

By: /s/ Carlos Valles
Name: Carlos Valles
Title: Vice President

Exhibit 10.27

AMENDMENT NO. 7
TO
AMENDED AND RESTATED LOAN AND SECURITY AGREEMENT

This AMENDMENT NO. 7 TO AMENDED AND RESTATED LOAN AND SECURITY AGREEMENT (this " **Amendment**") is entered into as of July 21, 2016, by and among WELLS FARGO CAPITAL FINANCE, LLC, in its capacity as agent (in such capacity, "**Agent**") for the Lenders (as defined in the Loan Agreement referred to below), KINERGY MARKETING LLC ("**Kinergy**"), **and PACIFIC AG. PRODUCTS, LLC ("Pacific Ag"** and together with Kinergy, each individually, a **"Borrower"** and collectively, the **"Borrowers").**

WHEREAS, Borrowers, Agent and Lenders have entered into certain financing arrangements as set forth in (a) the Amended and Restated Loan and Security Agreement, dated as of May 4, 2012, by and among Agent, Lenders and Borrowers (as amended, restated, renewed, extended, supplemented, substituted and otherwise modified from time to time, the "**Loan Agreement**") and (b) the Financing Agreements (as defined in the Loan Agreement); WHEREAS, Borrowers have advised Agent that Pacific AG desires to enter into (a) a Corn Procurement and Supply Agreement, dated on or about the date hereof; by and between Pacific AG and Pacific Ethanol Aurora East, LLC, (b) a Corn Procurement and Supply Agreement, dated on or about the date hereof, by and between Pacific AG and Pacific Ethanol Aurora West, LLC and (c) a Corn Procurement and Supply Agreement, dated on or about the date hereof, by and between Pacific AG and Pacific Ethanol Pekin, Inc. (collectively, in each instance substantially in the forms attached as Exhibit A hereto, the **"Procurement and Supply Agreements**"); and

WHEREAS, Borrowers, Agent and Lenders have agreed to amend and modify certain provisions of Loan Agreement, subject to the terms and conditions of this Amendment.

NOW, THEREFORE, upon the mutual agreements and covenants set forth herein and for other good and valuable consideration, the receipt and sufficiency of which are hereby acknowledged, the parties hereto agree as follows:

1. Definitions. Capitalized terms used and not defined in this Amendment shall have the respective meanings given them in the Loan Agreement.

2. Consent. To the extent their consent may be necessary or required under the Loan Agreement or the other Financing Agreements, Agent and Lenders hereby consent to the execution and performance by Pacific AG of the Procurement and Supply Agreements.

3. Amendment to Eligible Accounts. Subsection (n) of Section 1.33 of the Loan Agreement is hereby deleted in its entirety and the following substituted therefor:

"(n) such Accounts are not unpaid more than (i) in the case of Accounts of Pacific AG, thirty (30) days after the original due date for such Accounts or ninety (90) days after the date of the original invoice for them, and (ii) in the case of all other Accounts, thirty (30) days after the original due date for such Accounts or forty-five (45) days after the date of the original invoice for them;"

4 . Additional Representation. In addition to the continuing representations, warranties and covenants at any time made by Borrowers to Agent and Lenders pursuant to the Loan Agreement and the other Financing Agreements, Borrowers hereby jointly and severally represent, warrant and covenant with and to Agent and Lenders that, (a) as of the date of this Amendment and after giving effect hereto, no Default or Event of Default exists or has occurred and is continuing and (b) Borrowers have provided to Agent true and complete copies of the Aventine Term Loan Agreement and Term Loan Intercreditor Agreement, in each case, as in effect as of the date hereof.

5 . Release. In consideration of the agreements of Agent and Lenders contained herein and the making of loans by or on behalf of Agent and Lenders to Borrowers pursuant to the Loan Agreement, and for other good and valuable consideration, the receipt and sufficiency of which is hereby acknowledged, each Borrower and Parent on behalf of itself and its successors, assigns, and other legal representatives, hereby, jointly and severally, absolutely, unconditionally and irrevocably releases, remises and forever discharges Agent and each Lender, and their present and former shareholders, affiliates, subsidiaries, divisions, predecessors, directors, officers, attorneys, employees, agents and other representatives and their respective successors and assigns (Agent, each Lender and all such other parties being hereinafter referred to collectively as the "**Releasees**" and individually as a "**Releasee**"), of and from all demands, actions, causes of action, suits, covenants, contracts, controversies, agreements, promises, sums of money, accounts, bills, reckonings, damages and any and all other claims, counterclaims, defenses, rights of set-off, demands and liabilities whatsoever (individually, a "**Claim**" and collectively, "**Claims"**) of every name and nature, known or unknown, suspected or unsuspected, both at law and in equity, whether liquidated or unliquidated, matured or unmatured, asserted or unasserted, fixed or contingent, foreseen or unforeseen and anticipated or unanticipated, which any Borrower or Parent, or any of its successors, assigns, or other legal representatives and its successors and assigns may now or hereafter own, hold, have or claim to have against the Releasees or any of them for, upon, or by reason of any nature, cause or thing whatsoever which arises at any time on or prior to the day and date of this Agreement, in relation to, or in any way in connection with the Loan Agreement, as amended and supplemented through the date hereof, this Agreement and the other Financing Agreements. Each Borrower and Parent understands, acknowledges and agrees that the release set forth above may be pleaded as a full and complete defense and may be used as a basis for an injunction against any action, suit or other proceeding which may be instituted, prosecuted or attempted **in** breach of the provisions of such release.

6 . Conditions to Effectiveness. The effectiveness of this Amendment shall be subject to the receipt by Agent of an original (or electronic copy) of this Amendment duly authorized, executed and delivered by Borrowers and Lenders.

7. Effect of this Amendment. Except as modified pursuant hereto, no other changes or modifications to the Loan Agreement or the other Financing Agreements are intended or implied and in all other respects the Loan Agreement and other Financing Agreements are hereby specifically ratified, restated and confirmed by all parties hereto as of the date hereof. To the extent of conflict between the terms of this Amendment, on the one hand, and Loan Agreement or the other Financing Agreements, on the other hand, the terms of this Amendment shall control.

8 . Further Assurances. Borrowers shall execute and deliver such additional documents and take such additional action as may be reasonably requested by Agent to effectuate the provisions and purposes of this Amendment.

9 . Binding Effect. This Amendment shall be binding upon and inure to the benefit of each of the parties hereto and their respective successors and assigns.

10. Governing Law. The rights and obligations hereunder of each of the parties hereto shall be governed by and interpreted and determined in accordance with the internal laws of the State of California (without giving effect to principles of conflict of laws).

11. Counterparts. This Amendment may be signed in counterparts, each of which shall be an original and all of which taken together constitute one agreement. In making proof of this Amendment, it shall not be necessary to produce or account for more than one counterpart signed by the party to be charged. Delivery of an executed counterpart of this Amendment electronically or by facsimile shall be effective as delivery of an original executed counterpart of this Amendment.

[REMAINDER OF PAGE INTENTIONALLY LEFT BLANK]

IN WITNESS WHEREOF, the parties hereto have caused this Amendment to be duly executed and delivered by their authorized officers as of the day and year first above written.

BORROWERS:

KINERGY MARKETING LLC,
as a Borrower

By: /s/ Bryon T. McGregor
Name: Bryon T. McGregor
Title: CFO

PACIFIC AG. PRODUCTS, LLC,
as a Borrower

By: /s/ Bryon T. McGregor
Name: Bryon T. McGregor
Title: CFO

ACKNOWLEDGED AND AGREED:

PACIFIC ETHANOL, INC,
as Parent

By: /s/ Bryon T. McGregor
Name: Bryon T. McGregor
Title: CFO

AGENT AND LENDER:

WELLS FARGO CAPITAL FINANCE, LLC,
as Agent and sole Lender

By: /s/ Carlos Valles
Name: Carlos Valles
Title: Vice President

EXHIBIT A
[See Attached]

CONFIRMATION AND ACKNOWLEDGMENT BY BAILLEE

July 21, 2016

PACIFIC ETHANOL AURORA WEST, LLC
400 Capitol Mall, Suite 2060
Sacramento, California 95814

Ladies and Gentlemen:

Reference is made to the Bailee Notification and Acknowledgment of Security Interest, dated July 1,2015 (as amended, the "**Agreement**"), by and among Pacific Ethanol Aurora East, LLC ("**Bailee**") and Kinergy Marketing, LLC ("**Kinergy**").

In consideration of the foregoing, and for other good and valuable consideration, the receipt and sufficiency of which is hereby acknowledged, each of the undersigned acknowledges, confirms and agrees that (a) all references in the Agreement to the Company include, without limitation, Pacific AG Products, LLC ("**Pacific AG**"), (b) the Collateral includes, without limitation, assets and properties of Pacific AG that would constitute Collateral if an asset or property of Kinergy or any other Company and (c) Pacific AG hereby joins the Agreement as a Company thereunder to the same extent as if it were an original signatory thereto.

Except as modified pursuant hereto, no other changes or modifications to the Agreement are intended or implied and in all other respects Agreement is hereby specifically ratified, restated and confirmed by all parties hereto as of the date hereof. To the extent of conflict between the terms of this letter, on the one hand, and the Agreement, on the other hand, the terms of this letter shall control.

Please acknowledge your letter agreement to the foregoing by signing in the space provided below.

Very truly yours,

KINERGY MARKETING, LLC

By: /s/ Bryon T. McGregor
Name: Bryon T. McGregor
Title: CFO

PACIFIC AG PRODUCTS, LLC

By: /s/ Bryon T. McGregor
Name: Bryon T. McGregor
Title: CFO

ACKNOWLEDGED AND AGREED:

PACIFIC ETHANOL AURORA EAST, LLC

By: /s/ Bryon T. McGregor
Name: Bryon T. McGregor
Title: CFO

CONFIRMATION AND ACKNOWLEDGMENT BY BAILLEE

July 21, 2016

PACIFIC ETHANOL AURORA WEST, LLC
400 Capitol Mall, Suite 2060
Sacramento, California 95814

Ladies and Gentlemen:

Reference is made to the Bailee Notification and Acknowledgment of Security Interest, dated July 1, 2015 (as amended, the "**Agreement**"), by and among Pacific Ethanol Aurora West, LLC ("**Bailee**") and Kinergy Marketing, LLC ("**Kinergy**").

In consideration of the foregoing, and for other good and valuable consideration, the receipt and sufficiency of which is hereby acknowledged, each of the undersigned acknowledges, confirms and agrees that (a) all references in the Agreement to the Company include, without limitation, Pacific AG Products, LLC ("**Pacific AG**"), (b) the Collateral includes, without limitation, assets and properties of Pacific AG that would constitute Collateral if an asset or property of Kinergy or any other Company and (c) Pacific AG hereby joins the Agreement as a Company thereunder to the same extent as if it were an original signatory thereto. Except as modified pursuant hereto, no other changes or modifications to the Agreement are intended or implied and in all other respects Agreement is hereby specifically ratified, restated and confirmed by all parties hereto as of the date hereof. To the extent of conflict between the terms of this letter, on the one hand, and the Agreement, on the other hand, the terms of this letter shall control.

Please acknowledge your letter agreement to the foregoing by signing in the space provided below.

Very truly yours,

KINERGY MARKETING, LLC

By: /s/ Bryon T. McGregor
Name: Bryon T. McGregor
Title: CFO

PACIFIC AG PRODUCTS, LLC

By: /s/ Bryon T. McGregor
Name: Bryon T. McGregor
Title: CFO

ACKNOWLEDGED AND AGREED:

PACIFIC ETHANOL AURORA WEST, LLC

By: /s/ Bryon T. McGregor
Name: Bryon T. McGregor
Title: CFO

CONFIRMATION AND ACKNOWLEDGMENT BY BAILLEE

July 21, 2016

PACIFIC ETHANOL AURORA WEST, LLC
400 Capitol Mall, Suite 2060
Sacramento, California 95814

Ladies and Gentlemen:

Reference is made to the Bailee Notification and Acknowledgment of Security Interest, dated July 1, 2015 (as amended, the "**Agreement**"), by and among Pacific Ethanol Pekin, LLC ("**Bailee**") and Kinergy Marketing, LLC ("**Kinergy**").

In consideration of the foregoing, and for other good and valuable consideration, the receipt and sufficiency of which is hereby acknowledged, each of the undersigned acknowledges, confirms and agrees that (a) all references in the Agreement to the Company include, without limitation, Pacific AG Products, LLC ("**Pacific AG**"), (b) the Collateral includes, without limitation, assets and properties of Pacific AG that would constitute Collateral if an asset or property of Kinergy or any other Company and (c) Pacific AG hereby joins the Agreement as a Company thereunder to the same extent as if it were an original signatory thereto. Except as modified pursuant hereto, no other changes or modifications to the Agreement are intended or implied and in all other respects Agreement is hereby specifically ratified, restated and confirmed by all parties hereto as of the date hereof. To the extent of conflict between the terms of this letter, on the one hand, and the Agreement, on the other hand, the terms of this letter shall control.

Please acknowledge your letter agreement to the foregoing by signing in the space provided below.

Very truly yours,

KINERGY MARKETING, LLC

By: /s/ Bryon T. McGregor
Name: Bryon T. McGregor
Title: CFO

PACIFIC AG PRODUCTS, LLC

By: /s/ Bryon T. McGregor
Name: Bryon T. McGregor
Title: CFO

ACKNOWLEDGED AND AGREED:

PACIFIC ETHANOL AURORA PEKIN, LLC

By: /s/ Bryon T. McGregor
Name: Bryon T. McGregor
Title: CFO

Exhibit 10.28

AMENDMENT NO. 8
TO
AMENDED AND RESTATED LOAN AND SECURITY AGREEMENT

This AMENDMENT NO. 8 TO AMENDED AND RESTATED LOAN AND SECURITY AGREEMENT (this " **Amendment**") is entered into as of December 15, 2016, by and among WELLS FARGO CAPITAL FINANCE, LLC, in its capacity as agent (in such capacity, "**Agent**") for the Lenders (as defined in the Loan Agreement referred to below), KINERGY MARKETING LLC ("**Kinergy**"), and PACIFIC AG. PRODUCTS, LLC ("**Pacific Ag**" and together with Kinergy, each individually, a "**Borrower**" and collectively, the "**Borrowers**").

WHEREAS, Borrowers, Agent and Lenders have entered into certain financing arrangements as set forth in (a) the Amended and Restated Loan and Security Agreement, dated as of May 4, 2012, by and among Agent, Lenders and Borrowers (as amended, restated, renewed, extended, supplemented, substituted and otherwise modified from time to time, the "**Loan Agreement**") and (b) the Financing Agreements (as defined in the Loan Agreement);

WHEREAS, Borrowers have requested, pursuant to Section 2.3 of the Loan Agreement, that the Maximum Credit be increased to $85,000,000; and

WHEREAS, Borrowers, Agent and Lenders are willing to agree to such request, subject to the terms and conditions of this Amendment.

WHEREAS, Borrowers have advised Agent that Borrowers desire to enter into new Marketing Agreements (as defined in the Loan Agreement) with certain of the Aventine Affiliates, each substantially in the form of Exhibit A attached hereto (the "**New Marketing Agreements**");

WHEREAS, Borrowers, Agent and Lenders have agreed to amend and modify certain provisions of Loan Agreement, subject to the terms and conditions of this Amendment.

NOW, THEREFORE, upon the mutual agreements and covenants set forth herein and for other good and valuable consideration, the receipt and sufficiency of which are hereby acknowledged, the parties hereto agree as follows:

1. Definitions.

(a) Additional Definitions. The Loan Agreement is hereby amended to add the following new definition thereto:

""Amendment No. 8" shall mean Amendment No. 8 to Amended and Restated Loan and Security Agreement, dated as of December 15, 2016."

(b) Interpretation. Capitalized terms used and not defined in this Amendment shall have the respective meanings given them in the Loan Agreement.

2. Consent. To the extent their consent may be necessary or required under the Loan Agreement or the other Financing Agreement, Agent and Lenders hereby consent to the consummation of the transactions contemplated by the New Marketing Agreements.

3. Amendments.

(a) Maximum Credit. Section 1.86 of the Loan Agreement is hereby deleted in its entirety and the following substituted therefor:

"1.86 "Maximum Credit" shall mean the amount of $85,000,000."

(b) Aventine Definitions. Each reference to the terms "Aventine Acquired Inventory", "Aventine Affiliates", "Aventine Revolving Agent", "Aventine Term Agent", "Aventine Lenders", "Aventine Revolving Loan Agreement", and "Aventine Term Loan Agreement" appearing in the Loan Agreement are hereby replaced with, respectively, the terms "Pacific Ethanol Acquired Inventory", "Pacific Ethanol Affiliates", "Pacific Ethanol Revolving Agent", "Pacific Ethanol Term Agent", "Pacific Ethanol Lenders", "Pacific Ethanol Revolving Loan Agreement", and "Pacific Ethanol Term Loan Agreement".

(c) Pacific Ethanol Affiliates. The definition of "Pacific Ethanol Affiliates" (as such term has been amended by the foregoing clause (b)) set forth in the Loan Agreement is hereby deleted in its entirety and the following substituted therefor:

> ""Pacific Ethanol Affiliates" mean, collectively, (a) Pacific Ethanol Central, LLC (f/k/a Aventine Renewal Energy Holdings, Inc.), (b) Pacific Ethanol Aurora West, LLC (f/k/a Aventine Renewable Energy – Aurora West, LLC), (c) Pacific Ethanol Pekin, LLC (f/k/a Aventine Renewable Energy, Inc.), (d) Aventine Renewable Energy – Mt Vernon, LLC, (e) Aventine Renewable Energy - Canton, LLC, (f) Pacific Ethanol Aurora East, LLC (f/k/a Nebraska Energy, L.L.C.), (g) Aventine Power, LLC, and (h) Pacific Aurora, LLC, in each instance, together with its successors and assigns."

(d) Pacific Ethanol Term Loan Agreement. The definition of "Pacific Ethanol Term Loan Agreement" (as such term has been amended by the foregoing clause (b)) set forth in the Loan Agreement is hereby deleted in its entirety and the following substituted therefor:

> ""Pacific Ethanol Term Loan Agreement" shall mean, collectively, (a) the Credit Agreement, dated as of December 15, 2016, by and among the financial institutions from time to time party thereto as lenders, CoBank, ACB, in its capacity as agent for such financial institutions, and Pacific Ethanol Pekin, Inc. as the borrower thereunder, (b) the Credit Agreement, dated as of December 15, 2016, by and among CoBank, ACB, in its capacity lender, Pacific Ethanol Aurora East, LLC, Pacific Ethanol Aurora West, LLC and Pacific Aurora, LLC as co-borrowers thereunder, and (c) any successor agreement executed by any Pacific Ethanol Affiliate to refinance or replace such Credit Agreement or any successor agreement, in each case, as the same now exists or may hereafter be amended, modified, supplemented, extended, renewed, restated or replaced."

(e) Marketing Agreements. The definition of "Marketing Agreements" set forth in the Loan Agreement is hereby deleted in its entirety and the following substituted therefor:

> ""Marketing Agreements" shall mean each of (i) the Ethanol Marketing Agreement (Pekin Facility), dated on or about the date of Amendment No. 3, between Kinergy and Pacific Ethanol Pekin, LLC, as amended from time to time, including Amendment No. 1. To Ethanol Marketing Agreement dated as of December 15, 2016, (ii) the Ethanol Marketing Agreement, dated on or about the date of Amendment No. 8, between Kinergy and Pacific Aurora, LLC, (iii) that Co-Product Marketing Agreement, dated on or about the date of Amendment No. 8, between Pacific Ag and Pacific Aurora, LLC, and (iv) such other marketing agreements that may be approved by Agent from time to time in its reasonable discretion, each as amended, restated, supplemented or modified from time to time."

4. Accordion Acknowledgment. Borrowers acknowledges and agrees that this Amendment and the increase to the Maximum Credit set forth herein constitutes a request by Administrative Borrower to Agent to increase the Maximum Credit, and an increase to the Maximum Credit, under and for purposes of Section 2.3 of the Loan Agreement.

5. Amendment Fee. In addition to all other fees, costs and expenses payable by Borrowers to Agent and Lenders under the Financing Agreements, Borrowers shall pay to Agent an amendment fee in the amount of $37,500 (the "**Amendment Fee**"). The Amendment Fee shall be fully earned, due and payable on the date hereof, and shall not be subject to refund or rebate for any reason. Borrowers acknowledge and agree that Agent may, in its sole and absolute discretion, allocate to itself or to any Lender all or any portion of the Amendment Fee.

6. Additional Representation. In addition to the continuing representations, warranties and covenants at any time made by Borrowers to Agent and Lenders pursuant to the Loan Agreement and the other Financing Agreements, Borrowers hereby jointly and severally represent, warrant and covenant with and to Agent and Lenders that, (a) as of the date of this Amendment and after giving effect hereto, no Default or Event of Default exists or has occurred and is continuing and (b) Borrowers have provided to Agent true and complete copies of the Pacific Ethanol Term Loan Agreement, as in effect as of the date hereof.

7. Release. In consideration of the agreements of Agent and Lenders contained herein and the making of loans by or on behalf of Agent and Lenders to Borrowers pursuant to the Loan Agreement, and for other good and valuable consideration, the receipt and sufficiency of which is hereby acknowledged, each Borrower and Parent on behalf of itself and its successors, assigns, and other legal representatives, hereby, jointly and severally, absolutely, unconditionally and irrevocably releases, remises and forever discharges Agent and each Lender, and their present and former shareholders, affiliates, subsidiaries, divisions, predecessors, directors, officers, attorneys, employees, agents and other representatives and their respective successors and assigns (Agent, each Lender and all such other parties being hereinafter referred to collectively as the "**Releasees**" and individually as a "**Releasee**"), of and from all demands, actions, causes of action, suits, covenants, contracts, controversies, agreements, promises, sums of money, accounts, bills, reckonings, damages and any and all other claims, counterclaims, defenses, rights of set-off, demands and liabilities whatsoever (individually, a "**Claim**" and collectively, "**Claims**") of every name and nature, known or unknown, suspected or unsuspected, both at law and in equity, whether liquidated or unliquidated, matured or unmatured, asserted or unasserted, fixed or contingent, foreseen or unforeseen and anticipated or unanticipated, which any Borrower or Parent, or any of its successors, assigns, or other legal representatives and its successors and assigns may now or hereafter own, hold, have or claim to have against the Releasees or any of them for, upon, or by reason of any nature, cause or thing whatsoever which arises at any time on or prior to the day and date of this Agreement, in relation to, or in any way in connection with the Loan Agreement, as amended and supplemented through the date hereof, this Agreement and the other Financing Agreements. Each Borrower and Parent understands, acknowledges and agrees that the release set forth above may be pleaded as a full and complete defense and may be used as a basis for an injunction against any action, suit or other proceeding which may be instituted, prosecuted or attempted in breach of the provisions of such release.

8. Conditions to Effectiveness**.** The effectiveness of this Amendment shall be subject to the receipt by Agent of (a) an original (or electronic copy) of this Amendment duly authorized, executed and delivered by Borrowers and Lenders, (b) an original (or electronic copy) of the Pacific Ethanol Term Loan Agreement duly authorized, executed and delivered by the parties thereto and (c) evidence, satisfactory to Agent, of the receipt by (or for the account of) the Pacific Ethanol Affiliates of not less than $155.1 million in principal plus accrued interest of net proceeds from the term loan contemplated in the Pacific Ethanol Term Loan Agreement.

9. Effect of this Amendment**.** Except as modified pursuant hereto, no other changes or modifications to the Loan Agreement or the other Financing Agreements are intended or implied and in all other respects the Loan Agreement and other Financing Agreements are hereby specifically ratified, restated and confirmed by all parties hereto as of the date hereof. To the extent of conflict between the terms of this Amendment, on the one hand, and Loan Agreement or the other Financing Agreements, on the other hand, the terms of this Amendment shall control.

10. Further Assurances. Borrowers shall execute and deliver such additional documents and take such additional action as may be reasonably requested by Agent to effectuate the provisions and purposes of this Amendment.

11. Binding Effect. This Amendment shall be binding upon and inure to the benefit of each of the parties hereto and their respective successors and assigns.

12. Governing Law. The rights and obligations hereunder of each of the parties hereto shall be governed by and interpreted and determined in accordance with the internal laws of the State of California (without giving effect to principles of conflict of laws).

13. Counterparts**.** This Amendment may be signed in counterparts, each of which shall be an original and all of which taken together constitute one agreement. In making proof of this Amendment, it shall not be necessary to produce or account for more than one counterpart signed by the party to be charged. Delivery of an executed counterpart of this Amendment electronically or by facsimile shall be effective as delivery of an original executed counterpart of this Amendment.

[REMAINDER OF PAGE INTENTIONALLY LEFT BLANK]

IN WITNESS WHEREOF, the parties hereto have caused this Amendment to be duly executed and delivered by their authorized officers as of the day and year first above written.

BORROWERS:

KINERGY MARKETING LLC,
as a Borrower

By: /s/ Bryon T. McGregor
Name: Bryon T. McGregor
Title: CFO

PACIFIC AG. PRODUCTS, LLC,
as a Borrower

By: /s/ Bryon T. McGregor
Name: Bryon T. McGregor
Title: CFO

ACKNOWLEDGED AND AGREED:

PACIFIC ETHANOL, INC,
as Parent

By: /s/ Bryon T. McGregor
Name: Bryon T. McGregor
Title: CFO

AGENT AND LENDER:

WELLS FARGO CAPITAL FINANCE, LLC,
as Agent and sole Lender

By: /s/ Carlos Valles
Name: Carlos Valles
Title: Vice President

Signature Page to 8th Amendment

EXHIBIT 21.1

SUBSIDIARIES OF THE REGISTRANT

Subsidiary Name*	Name(s) Under Which Subsidiary Does Business**	State or Jurisdiction of Incorporation or Organization
Kinergy Marketing LLC	–	Oregon
Pacific Ag. Products, LLC	PAP	California
Pacific Ethanol Development, LLC	–	Delaware
PE Op Co.	–	Delaware
Pacific Ethanol West, LLC	–	Delaware
Pacific Ethanol Columbia, LLC	–	Delaware
Pacific Ethanol Madera LLC	–	Delaware
Pacific Ethanol Magic Valley, LLC	–	Delaware
Pacific Ethanol Stockton LLC	–	Delaware
Pacific Ethanol Central, LLC	–	Delaware
Pacific Ethanol Canton, LLC	–	Delaware
Pacific Ethanol Pekin, LLC	–	Delaware
Pacific Aurora, LLC (1)	–	Delaware
Pacific Ethanol Aurora East, LLC (1)	–	Delaware
Pacific Ethanol Aurora West, LLC (1)	–	Delaware

* All subsidiaries are directly or indirectly wholly-owned by the Registrant unless otherwise specified by footnote.

** If different from the name of the subsidiary.

(1) The Registrant indirectly holds a 73.93% ownership interest in Pacific Aurora, LLC, which owns Pacific Ethanol Aurora East, LLC and Pacific Ethanol Aurora West, LLC.

Exhibit 23.1

CONSENT OF INDEPENDENT REGISTERED PUBLIC ACCOUNTING FIRM

We consent to the incorporation by reference in Registration Statement (Nos. 333-137663, 333-169002, 333-176540, 333-185884, 333-189478, 333-196876 and 333-212070) on Form S-8 and (Nos. 333-178685, 333-180731 and 333-195364) on Form S-3 and (No. 333-201879) on Form S-4, of Pacific Ethanol, Inc. of our reports dated March 15, 2017, relating to our audits of the consolidated financial statements and internal control over financial reporting of Pacific Ethanol, Inc., which appear in this Annual Report on Form 10-K of Pacific Ethanol, Inc. for the year ended December 31, 2016.

/s/ RSM US LLP

Sioux Falls, South Dakota
March 15, 2017

Exhibit 23.2

Consent of Independent Registered Public Accounting Firm

To the Board of Directors
Pacific Ethanol, Inc.
Sacramento, California

We consent to the incorporation by reference in Registration Statement (Nos. 333-137663, 333-169002, 333-176540, 333-185884, 333-189478, 333-196876, and 333-212070) on Form S-8 and (Nos. 333-178685, 333-180731 and 333-195364) on Form S-3 and (No. 333-201879) on Form S-4, of Pacific Ethanol, Inc. of our report dated March 16, 2015, relating to our audit of the consolidated financial statements for the year ended December 31, 2014, which appears in this Annual Report on Form 10-K of Pacific Ethanol, Inc. for the year ended December 31, 2016.

/s/ Hein & Associates LLP

Hein & Associates LLP

Irvine, California
March 15, 2017

EXHIBIT 31.1

CERTIFICATION

I, Neil M. Koehler, certify that:

1. I have reviewed this Annual Report on Form 10-K of Pacific Ethanol, Inc.;

2. Based on my knowledge, this report does not contain any untrue statement of a material fact or omit to state a material fact necessary to make the statements made, in light of the circumstances under which such statements were made, not misleading with respect to the period covered by this report;

3. Based on my knowledge, the financial statements, and other financial information included in this report, fairly present in all material respects the financial condition, results of operations and cash flows of the registrant as of, and for, the periods presented in this report;

4. The registrant's other certifying officers and I are responsible for establishing and maintaining disclosure controls and procedures (as defined in Exchange Act Rules 13a-15(e) and 15d-15(e)) and internal control over financial reporting (as defined in Exchange Act Rules 13a-15(f) and 15d-15(f)) for the registrant and have:

(a) Designed such disclosure controls and procedures, or caused such disclosure controls and procedures to be designed under our supervision, to ensure that material information relating to the registrant, including its consolidated subsidiaries, is made known to us by others within those entities, particularly during the period in which this report is being prepared;

(b) Designed such internal control over financial reporting, or caused such internal control over financial reporting to be designed under our supervision, to provide reasonable assurance regarding the reliability of financial reporting and the preparation of financial statements for external purposes in accordance with generally accepted accounting principles;

(c) Evaluated the effectiveness of the registrant's disclosure controls and procedures and presented in this report our conclusions about the effectiveness of the disclosure controls and procedures, as of the end of the period covered by this report based on such evaluation; and

(d) Disclosed in this report any change in the registrant's internal control over financial reporting that occurred during the registrant's most recent fiscal quarter (the registrant's fourth fiscal quarter in the case of an annual report) that has materially affected, or is reasonably likely to materially affect, the registrant's internal control over financial reporting; and

5. The registrant's other certifying officer(s) and I have disclosed, based on our most recent evaluation of internal control over financial reporting, to the registrant's auditors and the audit committee of the registrant's board of directors (or persons performing the equivalent functions):

(a) All significant deficiencies and material weaknesses in the design or operation of internal control over financial reporting which are reasonably likely to adversely affect the registrant's ability to record, process, summarize and report financial information; and

(b) Any fraud, whether or not material, that involves management or other employees who have a significant role in the registrant's internal control over financial reporting.

Date: March 15, 2017

/s/ NEIL M. KOEHLER
Neil M. Koehler
President and Chief Executive Officer (Principal Executive Officer)

EXHIBIT 31.2

CERTIFICATION

I, Bryon T. McGregor, certify that:

1. I have reviewed this Annual Report on Form 10-K of Pacific Ethanol, Inc.;

2. Based on my knowledge, this report does not contain any untrue statement of a material fact or omit to state a material fact necessary to make the statements made, in light of the circumstances under which such statements were made, not misleading with respect to the period covered by this report;

3. Based on my knowledge, the financial statements, and other financial information included in this report, fairly present in all material respects the financial condition, results of operations and cash flows of the registrant as of, and for, the periods presented in this report;

4. The registrant's other certifying officers and I are responsible for establishing and maintaining disclosure controls and procedures (as defined in Exchange Act Rules 13a-15(e) and 15d-15(e)) and internal control over financial reporting (as defined in Exchange Act Rules 13a-15(f) and 15d-15(f)) for the registrant and have:

(a) Designed such disclosure controls and procedures, or caused such disclosure controls and procedures to be designed under our supervision, to ensure that material information relating to the registrant, including its consolidated subsidiaries, is made known to us by others within those entities, particularly during the period in which this report is being prepared;

(b) Designed such internal control over financial reporting, or caused such internal control over financial reporting to be designed under our supervision, to provide reasonable assurance regarding the reliability of financial reporting and the preparation of financial statements for external purposes in accordance with generally accepted accounting principles;

(c) Evaluated the effectiveness of the registrant's disclosure controls and procedures and presented in this report our conclusions about the effectiveness of the disclosure controls and procedures, as of the end of the period covered by this report based on such evaluation; and

(d) Disclosed in this report any change in the registrant's internal control over financial reporting that occurred during the registrant's most recent fiscal quarter (the registrant's fourth fiscal quarter in the case of an annual report) that has materially affected, or is reasonably likely to materially affect, the registrant's internal control over financial reporting; and

5. The registrant's other certifying officer(s) and I have disclosed, based on our most recent evaluation of internal control over financial reporting, to the registrant's auditors and the audit committee of the registrant's board of directors (or persons performing the equivalent functions):

(a) All significant deficiencies and material weaknesses in the design or operation of internal control over financial reporting which are reasonably likely to adversely affect the registrant's ability to record, process, summarize and report financial information; and

(b) Any fraud, whether or not material, that involves management or other employees who have a significant role in the registrant's internal control over financial reporting.

Date: March 15, 2017

/s/ BRYON T. MCGREGOR
Bryon T. McGregor
Chief Financial Officer (Principal Financial and Accounting Officer)

EXHIBIT 32.1

CERTIFICATIONS OF CHIEF EXECUTIVE OFFICER AND CHIEF FINANCIAL OFFICER
PURSUANT TO 18 U.S.C. SECTION 1350,
AS ADOPTED PURSUANT TO
SECTION 906 OF THE SARBANES-OXLEY ACT OF 2002

In connection with the Annual Report on Form 10-K of Pacific Ethanol, Inc. (the "Company") for the year ended December 31, 2016 (the "Report"), the undersigned hereby certify in their capacities as Chief Executive Officer and Chief Financial Officer of the Company, respectively, pursuant to 18 U.S.C. section 1350, as adopted pursuant to Section 906 of the Sarbanes-Oxley Act of 2002, that:

1. the Report fully complies with the requirements of Section 13(a) or 15(d) of the Securities Exchange Act of 1934, as amended; and

2. the information contained in the Report fairly presents, in all material respects, the financial condition and results of operations of the Company.

Date: March 15, 2017

By: /s/ NEIL M. KOEHLER
Neil M. Koehler
Chief Executive Officer
(Principal Executive Officer)

Date: March 15, 2017

By: /s/ BRYON T. MCGREGOR
Bryon T. McGregor
Chief Financial Officer (Principal Financial and Accounting Officer)

A signed original of this written statement required by Section 906, or other document authenticating, acknowledging, or otherwise adopting the signatures that appear in typed form within the electronic version of this written statement required by Section 906, has been provided to the Company and will be retained by the Company and furnished to the Securities and Exchange Commission or its staff upon request.