**UNITED STATES**
**SECURITIES AND EXCHANGE COMMISSION**
**Washington, D.C. 20549**
______________________

# FORM 10-Q

**Quarterly Report Pursuant to Section 13 or 15(d) of the Securities Exchange Act of 1934**

**For the Quarterly Period Ended September 30, 2017**

**Commission File Number 001-32924**

## GREEN PLAINS INC.

(Exact name of registrant as specified in its charter)

| **Iowa** | **84-1652107** |
|---|---|
| (State or other jurisdiction of incorporation or organization) | (I.R.S. Employer Identification No.) |
| **1811 Aksarben Drive, Omaha, NE 68106** | **(402) 884-8700** |
| (Address of principal executive offices, including zip code) | (Registrant's telephone number, including area code) |

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 Web site, if any, every Interactive Data File required to be submitted and posted pursuant to Rule 405 of Regulation S-T (§232.405 of this chapter) 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 whether the registrant is a large accelerated filer, an accelerated filer, a non-accelerated filer, a smaller reporting company, or an emerging growth company. See the definitions of "large accelerated filer," "accelerated filer," "smaller reporting company" and "emerging growth company" in Rule 12b-2 of the Exchange Act.

Large accelerated filer ☐ Accelerated filer ☒

Non-accelerated filer ☐ (Do not check if a smaller reporting company)

Smaller reporting company ☐ Emerging growth company ☐

If an emerging growth company, indicate by check mark if the registrant has elected not to use the extended transition period for complying with any new or revised financial accounting standards provided pursuant to Section 13(a) of the Exchange Act. ☐

Indicate by check mark whether the registrant is a shell company (as defined in Rule 12b-2 of the Exchange Act).

☐ Yes ☒ No

The number of shares of common stock, par value $0.001 per share, outstanding as of October 27, 2017, was 41,162,204 shares.

**TABLE OF CONTENTS**


| | | Page |
|---|---|---|
| Commonly Used Defined Terms | | 2 |
| | **PART I – FINANCIAL INFORMATION** | |
| Item 1. | Financial Statements | |
| | Consolidated Balance Sheets | 3 |
| | Consolidated Statements of Operations | 4 |
| | Consolidated Statements of Comprehensive Income (Loss) | 5 |
| | Consolidated Statements of Cash Flows | 6 |
| | Notes to Consolidated Financial Statements | 8 |
| Item 2. | Management’s Discussion and Analysis of Financial Condition and Results of Operations | 30 |
| Item 3. | Quantitative and Qualitative Disclosures About Market Risk | 42 |
| Item 4. | Controls and Procedures | 44 |
| | **PART II – OTHER INFORMATION** | |
| Item 1. | Legal Proceedings | 46 |
| Item 1A. | Risk Factors | 46 |
| Item 2. | Unregistered Sales of Equity Securities and Use of Proceeds | 47 |
| Item 3. | Defaults Upon Senior Securities | 48 |
| Item 4. | Mine Safety Disclosures | 48 |
| Item 5. | Other Information | 48 |
| Item 6. | Exhibits | 49 |
| Signatures | | 51 |

**Commonly Used Defined Terms**

The abbreviations, acronyms and industry terminology used in this quarterly report are defined as follows:

*Green Plains Inc. and Subsidiaries:*

| | |
|---|---|
| Green Plains; the company | Green Plains Inc. and its subsidiaries |
| BioProcess Algae | BioProcess Algae LLC |
| Fleischmann's Vinegar | Fleischmann's Vinegar Company, Inc. |
| Green Plains Cattle | Green Plains Cattle Company LLC |
| Green Plains Grain | Green Plains Grain Company LLC |
| Green Plains Partners; the partnership | Green Plains Partners LP |
| Green Plains Processing | Green Plains Processing LLC and its subsidiaries |
| Green Plains Trade | Green Plains Trade Group LLC |

*Accounting Defined Terms:*

| | |
|---|---|
| ASC | Accounting Standards Codification |
| EBITDA | Earnings before interest, income taxes, depreciation and amortization |
| EPS | Earnings per share |
| Exchange Act | Securities Exchange Act of 1934, as amended |
| GAAP | U.S. Generally Accepted Accounting Principles |
| LIBOR | London Interbank Offered Rate |
| R&D Credits | Research and development tax credits |
| LTIP | Green Plains Partners LP 2015 Long-Term Incentive Plan |
| SEC | Securities and Exchange Commission |
| VIE | Variable interest entity |

*Industry Defined Terms:*

| | |
|---|---|
| CAFE | Corporate Average Fuel Economy |
| E15 | Gasoline blended with up to 15% ethanol by volume |
| E85 | Gasoline blended with up to 85% ethanol by volume |
| EIA | U.S. Energy Information Administration |
| EISA | Energy Independence and Security Act of 2007, as amended |
| EPA | U.S. Environmental Protection Agency |
| MmBTU | Million British Thermal Units |
| Mmg | Million gallons |
| Mmgy | Million gallons per year |
| RFS II | Renewable Fuels Standard II |
| RVO | Renewable volume obligations |
| U.S. | United States |

## PART I – FINANCIAL INFORMATION

### Item 1. Financial Statements

## GREEN PLAINS INC. AND SUBSIDIARIES

## CONSOLIDATED BALANCE SHEETS

### (in thousands, except share amounts)

| | September 30, 2017 | December 31, 2016 |
|---|---|---|
| | (unaudited) | |
| **ASSETS** | | |
| Current assets | | |
| Cash and cash equivalents | $ 261,588 | $ 304,211 |
| Restricted cash | 30,773 | 51,979 |
| Accounts receivable, net of allowances of $234 and $266, respectively | 114,978 | 147,495 |
| Income taxes receivable | 14,145 | 10,379 |
| Inventories | 612,447 | 422,181 |
| Prepaid expenses and other | 14,895 | 17,095 |
| Derivative financial instruments | 51,563 | 47,236 |
| Total current assets | 1,100,389 | 1,000,576 |
| Property and equipment, net of accumulated depreciation of $489,349 and $417,993, respectively | 1,188,270 | 1,178,706 |
| Goodwill | 182,879 | 183,696 |
| Other assets | 156,999 | 143,514 |
| Total assets | $ 2,628,537 | $ 2,506,492 |
| | | |
| **LIABILITIES AND STOCKHOLDERS' EQUITY** | | |
| Current liabilities | | |
| Accounts payable | $ 174,788 | $ 192,275 |
| Accrued and other liabilities | 48,500 | 67,473 |
| Derivative financial instruments | 12,004 | 8,916 |
| Short-term notes payable and other borrowings | 457,764 | 291,223 |
| Current maturities of long-term debt | 6,486 | 35,059 |
| Total current liabilities | 699,542 | 594,946 |
| Long-term debt | 829,923 | 782,610 |
| Deferred income taxes | 48,787 | 140,262 |
| Other liabilities | 35,892 | 9,483 |
| Total liabilities | 1,614,144 | 1,527,301 |
| | | |
| Commitments and contingencies (Note 13) | | |
| | | |
| Stockholders' equity | | |
| Common stock, $0.001 par value; 75,000,000 shares authorized; 46,430,449 and 46,079,108 shares issued, and 41,163,335 and 38,364,118 shares outstanding, respectively | 46 | 46 |
| Additional paid-in capital | 682,073 | 659,200 |
| Retained earnings | 283,592 | 283,214 |
| Accumulated other comprehensive loss | (13,607) | (4,137) |
| Treasury stock, 5,267,114 and 7,714,990 shares, respectively | (54,193) | (75,816) |
| Total Green Plains stockholders' equity | 897,911 | 862,507 |
| Noncontrolling interests | 116,482 | 116,684 |
| Total stockholders' equity | 1,014,393 | 979,191 |
| Total liabilities and stockholders' equity | $ 2,628,537 | $ 2,506,492 |

See accompanying notes to the consolidated financial statements.

**GREEN PLAINS INC. AND SUBSIDIARIES**

**CONSOLIDATED STATEMENTS OF OPERATIONS**

**(unaudited and in thousands, except per share amounts)**

| | Three Months Ended September 30, | | Nine Months Ended September 30, | |
|---|---|---|---|---|
| | **2017** | **2016** | **2017** | **2016** |
| Revenues | | | | |
| Product revenues | $ 899,534 | $ 839,786 | $ 2,670,458 | $ 2,472,741 |
| Service revenues | 1,701 | 2,066 | 4,724 | 6,042 |
| Total revenues | 901,235 | 841,852 | 2,675,182 | 2,478,783 |
| | | | | |
| Costs and expenses | | | | |
| Cost of goods sold | 815,787 | 758,883 | 2,457,702 | 2,293,094 |
| Operations and maintenance expenses | 8,309 | 8,564 | 25,107 | 25,713 |
| Selling, general and administrative expenses | 28,589 | 24,264 | 77,946 | 68,226 |
| Depreciation and amortization expenses | 27,834 | 19,286 | 80,105 | 56,132 |
| Total costs and expenses | 880,519 | 810,997 | 2,640,860 | 2,443,165 |
| Operating income | 20,716 | 30,855 | 34,322 | 35,618 |
| | | | | |
| Other income (expense) | | | | |
| Interest income | 383 | 484 | 1,061 | 1,263 |
| Interest expense | (31,889) | (11,819) | (69,815) | (33,117) |
| Other, net | 1,444 | (1,553) | 2,811 | (2,050) |
| Total other expense | (30,062) | (12,888) | (65,943) | (33,904) |
| Income (loss) before income taxes | (9,346) | 17,967 | (31,621) | 1,714 |
| Income tax expense (benefit) | (48,775) | 5,083 | (60,905) | (4,339) |
| Net income | 39,429 | 12,884 | 29,284 | 6,053 |
| Net income attributable to noncontrolling interests | 5,035 | 4,956 | 14,853 | 14,072 |
| Net income (loss) attributable to Green Plains | $ 34,394 | $ 7,928 | $ 14,431 | $ (8,019) |
| | | | | |
| Earnings per share: | | | | |
| Net income (loss) attributable to Green Plains - basic | $ 0.83 | $ 0.21 | $ 0.36 | $ (0.21) |
| Net income (loss) attributable to Green Plains - diluted | $ 0.74 | $ 0.20 | $ 0.48 | $ (0.21) |
| Weighted average shares outstanding: | | | | |
| Basic | 41,348 | 38,282 | 40,008 | 38,301 |
| Diluted | 50,647 | 39,136 | 50,693 | 38,301 |
| | | | | |
| Cash dividend declared per share | $ 0.12 | $ 0.12 | $ 0.36 | $ 0.36 |

See accompanying notes to the consolidated financial statements.

**GREEN PLAINS INC. AND SUBSIDIARIES**

**CONSOLIDATED STATEMENTS OF COMPREHENSIVE INCOME (LOSS)**

**(unaudited and in thousands)**

| | Three Months Ended September 30, | | Nine Months Ended September 30, | |
|---|---|---|---|---|
| | **2017** | **2016** | **2017** | **2016** |
| Net income | $ 39,429 | $ 12,884 | $ 29,284 | $ 6,053 |
| Other comprehensive income (loss), net of tax: | | | | |
| Unrealized gains (losses) on derivatives arising during period, net of tax (expense) benefit of $4,575, $(1,331), $5,633 and $762, respectively | (7,660) | 1,919 | (9,436) | (1,395) |
| Reclassification of realized (gains) losses on derivatives, net of tax expense (benefit) of $(2,650), $(1,144), $21 and $(1,369), respectively | 4,453 | 2,150 | (34) | 2,506 |
| Total other comprehensive income (loss), net of tax | (3,207) | 4,069 | (9,470) | 1,111 |
| Comprehensive income | 36,222 | 16,953 | 19,814 | 7,164 |
| Comprehensive income attributable to noncontrolling interests | 5,035 | 4,956 | 14,853 | 14,072 |
| Comprehensive income (loss) attributable to Green Plains | $ 31,187 | $ 11,997 | $ 4,961 | $ (6,908) |

See accompanying notes to the consolidated financial statements.

**GREEN PLAINS INC. AND SUBSIDIARIES**

**CONSOLIDATED STATEMENTS OF CASH FLOWS**

**(unaudited and in thousands)**

| | Nine Months Ended September 30, | |
|---|---|---|
| | **2017** | **2016** |
| Cash flows from operating activities: | | |
| Net income | $ 29,284 | $ 6,053 |
| Adjustments to reconcile net income to net cash provided (used) by operating activities: | | |
| Depreciation and amortization | 80,105 | 56,132 |
| Amortization of debt issuance costs and debt discount | 11,222 | 7,588 |
| Loss on exchange of 3.25% convertible notes due 2018 | 1,291 | - |
| Gain on disposal of assets | (2,439) | - |
| Write-off of deferred financing fees related to extinguishment of debt | 9,460 | - |
| Deferred income taxes | (88,565) | (16,413) |
| Other noncurrent assets and liabilities | 18,062 | - |
| Stock-based compensation | 8,761 | 7,043 |
| Undistributed equity in loss of affiliates | 120 | 2,067 |
| Other | - | 57 |
| Changes in operating assets and liabilities before effects of business combinations: | | |
| Accounts receivable | 32,267 | (36,431) |
| Inventories | (168,788) | 46,126 |
| Derivative financial instruments | (16,430) | 6,279 |
| Prepaid expenses and other assets | 2,180 | (849) |
| Accounts payable and accrued liabilities | (34,278) | (23,704) |
| Current income taxes | (1,540) | 8,089 |
| Other | 1,361 | 1,150 |
| Change in restricted cash | (4,289) | - |
| Net cash provided (used) by operating activities | (122,216) | 63,187 |
| | | |
| Cash flows from investing activities: | | |
| Purchases of property and equipment, net | (36,475) | (35,658) |
| Acquisition of a business, net of cash acquired | (61,727) | (252,488) |
| Investments in unconsolidated subsidiaries | (12,033) | (1,388) |
| Net cash used by investing activities | (110,235) | (289,534) |
| | | |
| Cash flows from financing activities: | | |
| Proceeds from the issuance of long-term debt | 551,500 | 337,000 |
| Payments of principal on long-term debt | (487,450) | (40,578) |
| Proceeds from short-term borrowings | 3,301,630 | 2,969,034 |
| Payments on short-term borrowings | (3,135,347) | (2,967,191) |
| Cash payment for exchange of 3.25% convertible notes due 2018 | (8,523) | - |
| Payments for repurchase of common stock | (5,733) | (6,005) |
| Payments of cash dividends and distributions | (29,267) | (27,837) |
| Payment penalty on early extinguishment of debt | (2,881) | - |
| Change in restricted cash | 25,495 | (7,200) |
| Payments of loan fees | (15,541) | (7,810) |
| Payments related to tax withholdings for stock-based compensation | (4,105) | (2,206) |
| Proceeds from exercise of stock options | 50 | 1,632 |
| Net cash provided by financing activities | 189,828 | 248,839 |
| | | |
| Net change in cash and cash equivalents | (42,623) | 22,492 |
| Cash and cash equivalents, beginning of period | 304,211 | 384,867 |
| Cash and cash equivalents, end of period | $ 261,588 | $ 407,359 |

**Continued on the following page**

**GREEN PLAINS INC. AND SUBSIDIARIES**

**CONSOLIDATED STATEMENTS OF CASH FLOWS**

**(unaudited and in thousands)**

**Continued from the previous page**

| | Nine Months Ended September 30, | |
|---|---|---|
| | **2017** | **2016** |
| Non-cash financing activity: | | |
| Exchange of 3.25% convertible notes due 2018 for shares of common stock | $ 47,743 | $ - |
| Exchange of common stock held in treasury stock for 3.25% convertible notes due 2018 | $ 27,356 | $ - |
| | | |
| Supplemental disclosures of cash flow: | | |
| Cash paid for income taxes | $ 2,062 | $ 3,348 |
| Cash paid for interest | $ 39,984 | $ 24,280 |
| | | |
| Supplemental investing and financing activities: | | |
| Assets acquired in acquisitions and mergers, net of cash | $ 62,209 | $ 257,942 |
| Less: liabilities assumed | (482) | (2,647) |
| Less: allocation of noncontrolling interest in consolidation of BioProcess Algae | - | (2,807) |
| Net assets acquired | $ 61,727 | $ 252,488 |

See accompanying notes to the consolidated financial statements.

## 1. BASIS OF PRESENTATION, DESCRIPTION OF BUSINESS AND SUMMARY OF SIGNIFICANT ACCOUNTING POLICIES

*References to the Company*

References to “Green Plains” or the “company” in the consolidated financial statements and in these notes to the consolidated financial statements refer to Green Plains Inc., an Iowa corporation, and its subsidiaries.

*Consolidated Financial Statements*

The consolidated financial statements include the company’s accounts and all significant intercompany balances and transactions are eliminated. Unconsolidated entities are included in the financial statements on an equity basis. The company owns a 62.5% limited partner interest and a 2.0% general partner interest in Green Plains Partners LP. Public investors own the remaining 35.5% limited partner interest in the partnership. The company determined that the limited partners in the partnership with equity at risk lack the power, through voting rights or similar rights, to direct the activities that most significantly impact partnership’s economic performance; therefore, the partnership is considered a VIE. The company, through its ownership of the general partner interest in the partnership, has the power to direct the activities that most significantly affect economic performance and the obligation to absorb losses or the right to receive benefits that could be potentially significant to the partnership; therefore, the company is considered the primary beneficiary and consolidates the partnership. The assets of the partnership cannot be used by the company for general corporate purposes. The partnership’s consolidated total assets as of September 30, 2017 and December 31, 2016 are $73.0 million and $75.0 million, respectively, and primarily consist of property and equipment and goodwill. The partnership’s consolidated total liabilities as of September 30, 2017 and December 31, 2016 are $155.8 million and $156.0 million, respectively, which primarily consist of long-term debt as discussed in Note 8 – Debt. The liabilities recognized as a result of consolidating the partnership do not represent additional claims on our general assets. The partnership is consolidated in the company’s financial statements. Effective April 1, 2016, the company increased its ownership of BioProcess Algae, a joint venture formed in 2008, to 82.8% and consolidated BioProcess Algae in its consolidated financial statements beginning on that date.

The accompanying unaudited consolidated financial statements are prepared in accordance with GAAP for interim financial information and the instructions to Form 10-Q and Article 10 of Regulation S-X. Because they do not include all of the information and footnotes required by GAAP, the consolidated financial statements should be read in conjunction with the company’s annual report on Form 10-K for the year ended December 31, 2016.

The unaudited financial information reflects adjustments which are, in the opinion of management, necessary for a fair presentation of results of operations, financial position and cash flows for the periods presented. The adjustments are normal and recurring in nature, unless otherwise noted. Interim period results are not necessarily indicative of the results to be expected for the entire year.

*Reclassifications*

Certain prior year amounts were reclassified to conform to the current year presentation. These reclassifications did not affect total revenues, costs and expenses, net income or stockholders’ equity.

*Use of Estimates in the Preparation of Consolidated Financial Statements*

The preparation of the consolidated financial statements in conformity with GAAP requires management to make certain estimates and assumptions that affect the reported amounts of assets and liabilities and disclosure of contingent assets and liabilities at the date of the consolidated financial statements and the reported amounts of revenues and expenses during the reporting period. The company bases its estimates on historical experience and assumptions it believes are proper and reasonable under the circumstances and regularly evaluates the appropriateness of its estimates and assumptions. Actual results could differ from those estimates. Key accounting policies, including but not limited to those relating to revenue recognition, depreciation of property and equipment, impairment of long-lived assets and goodwill, derivative financial instruments, and accounting for income taxes, are impacted significantly by judgments, assumptions and estimates used in the preparation of the consolidated financial statements.

*Description of Business*

Green Plains is North America's second largest consolidated owner of ethanol plants. The company operates four business segments: (1) ethanol production, which includes the production of ethanol, distillers grains and corn oil, (2) agribusiness and energy services, which includes grain handling and storage and marketing and merchant trading for company-produced and third-party ethanol, distillers grains, corn oil, natural gas and other commodities, (3) food and ingredients, which includes cattle feedlots, vinegar production and food-grade corn oil operations, and (4) partnership, which includes fuel storage and transportation services.

*Revenue Recognition*

The company recognizes revenue when the following criteria are satisfied: persuasive evidence that an arrangement exists, title of product and risk of loss are transferred to the customer, price is fixed and determinable and collectability is reasonably assured.

Sales of ethanol, distillers grains, corn oil, natural gas and other commodities by the company's marketing business are recognized when title of product and risk of loss are transferred to an external customer. Revenues related to marketing for third parties are presented on a gross basis when the company takes title of the product and assumes risk of loss. Unearned revenue is recorded for goods in transit when the company has received payment but the title has not yet been transferred to the customer. Revenues for receiving, storing, transferring and transporting ethanol and other fuels are recognized when the product is delivered to the customer.

The company routinely enters into fixed-price, physical-delivery energy commodity purchase and sale agreements. At times, the company settles these transactions by transferring its obligations to other counterparties rather than delivering the physical commodity. These transactions are reported net as a component of revenues. Revenues also include realized gains and losses on related derivative financial instruments, ineffectiveness on cash flow hedges and reclassifications of realized gains and losses on effective cash flow hedges from accumulated other comprehensive income or loss.

Sales of products, including agricultural commodities, cattle and vinegar, are recognized when title of product and risk of loss are transferred to the customer, which depends on the agreed upon terms. The sales terms provide passage of title when shipment is made or the commodity is delivered. Revenues related to grain merchandising are presented gross and include shipping and handling, which is also a component of cost of goods sold. Revenues from grain storage are recognized when services are rendered.

A substantial portion of the partnership revenues are derived from fixed-fee commercial agreements for storage, terminal or transportation services. The partnership recognizes revenue when there is evidence an arrangement exists, risk of loss and title transfer to the customer, the price is fixed or determinable, and collectability is reasonably ensured. Revenues from base storage, terminal or transportation services are recognized once these services are performed, which occurs when the product is delivered to the customer.

*Cost of Goods Sold*

Cost of goods sold includes direct labor, materials and plant overhead costs. Direct labor includes all compensation and related benefits of non-management personnel involved in ethanol plant, vinegar and cattle feedlot operations. Grain purchasing and receiving costs, excluding labor costs for grain buyers and scale operators, are also included in cost of goods sold. Materials include the cost of corn feedstock, denaturant, process chemicals, cattle and veterinary supplies. Corn feedstock costs include unrealized gains and losses on related derivative financial instruments not designated as cash flow hedges, inbound freight charges, inspection costs and transfer costs as well as realized gains and losses on related derivative financial instruments, ineffectiveness on cash flow hedges and reclassifications of realized gains and losses on effective cash flow hedges from accumulated other comprehensive income or loss. Plant overhead consists primarily of plant and feedlot utilities, repairs and maintenance, yard expenses and outbound freight charges. Shipping costs incurred by the company, including railcar costs, are also reflected in cost of goods sold.

The company uses exchange-traded futures and options contracts to minimize the effect of price changes on grain and cattle inventories and forward purchase and sales contracts. Exchange-traded futures and options contracts are valued at quoted market prices and settled predominantly in cash. The company is exposed to loss when counterparties default on forward purchase and sale contracts. Grain inventories held for sale and forward purchase and sale contracts are valued at market prices when available or other market quotes adjusted for differences, primarily in transportation, between the exchange-traded market and local market where the terms of the contract is based. Changes in the fair value of grain

inventories held for sale, forward purchase and sale contracts and exchange-traded futures and options contracts are recognized as a component of cost of goods sold.

*Operations and Maintenance Expenses*

In the partnership segment, transportation expenses represent the primary component of operations and maintenance expenses. Transportation expenses includes railcar leases, freight and shipping of the company's ethanol and co-products, as well as costs incurred storing ethanol at destination terminals.

*Derivative Financial Instruments*

The company uses various derivative financial instruments, including exchange-traded futures and exchange-traded and over-the-counter options contracts, to minimize risk and the effect of price changes related to corn, ethanol, cattle, natural gas and crude oil. The company monitors and manages this exposure as part of its overall risk management policy to reduce the adverse effect market volatility may have on its operating results. The company may hedge these commodities as one way to mitigate risk, however, there may be situations when these hedging activities themselves result in losses.

By using derivatives to hedge exposures to changes in commodity prices, the company is exposed to credit and market risk. The company's exposure to credit risk includes the counterparty's failure to fulfill its performance obligations under the terms of the derivative contract. The company minimizes its credit risk by entering into transactions with high quality counterparties, limiting the amount of financial exposure it has with each counterparty and monitoring their financial condition. Market risk is the risk that the value of the financial instrument might be adversely affected by a change in commodity prices or interest rates. The company manages market risk by incorporating parameters to monitor exposure within its risk management strategy, which limits the types of derivative instruments and strategies the company can use and the degree of market risk it can take using derivative instruments.

The company evaluates its physical delivery contracts to determine if they qualify for normal purchase or sale exemptions which are expected to be used or sold over a reasonable period in the normal course of business. Contracts that do not meet the normal purchase or sale criteria are recorded at fair value. Changes in fair value are recorded in operating income unless the contracts qualify for, and the company elects, hedge accounting treatment.

Certain qualifying derivatives related to ethanol production, agribusiness and energy services and food and ingredients segments are designated as cash flow hedges. The company evaluates the derivative instrument to ascertain its effectiveness prior to entering into cash flow hedges. Ineffectiveness is recognized in current period results, while other unrealized gains and losses are reflected in accumulated other comprehensive income until the gain or loss from the underlying hedged transaction is realized. When it becomes probable a forecasted transaction will not occur, the cash flow hedge treatment is discontinued, which affects earnings. These derivative financial instruments are recognized in current assets or other current liabilities at fair value.

At times, the company hedges its exposure to changes in the value of inventories and designates qualifying derivatives as fair value hedges. The carrying amount of the hedged inventory is adjusted in current period results for changes in fair value. Ineffectiveness of the hedges is recognized in current period results to the extent the change in fair value of the inventory is not offset by the change in fair value of the derivative.

*Recent Accounting Pronouncements*

Effective January 1, 2017, the company adopted the amended guidance in ASC Topic 330, *Inventory: Simplifying the Measurement of Inventory*, which requires inventory to be measured at lower of cost or net realizable value. Net realizable value is the estimated selling prices during the ordinary course of business, less reasonably predictable costs of completion, disposal and transportation. The amended guidance was applied prospectively.

Effective January 1, 2017, the company adopted the amended guidance in ASC Topic 718, *Compensation – Stock Compensation: Improvements to Employee Share-Based Payment Accounting*, which requires all income tax effects related to awards to be recognized in the income statement when the awards vest or settle. The amended guidance also allows an employer to repurchase more of an employee's shares for tax withholding purposes without triggering liability accounting and make a policy election to account for forfeitures as they occur. The amended guidance requiring recognition of excess tax benefits and tax deficiencies in the income statement was applied prospectively. The amended guidance related to the timing of when excess tax benefits are recognized, did not have an impact on the consolidated financial statements. The amended guidance related to the presentation of employee taxes paid on the statement of cash flows was applied retrospectively. This change resulted in a $2.2 million increase in cash flows from operating activities and a decrease in cash flows from financing

activities for the nine months ended September 30, 2016. The company has elected to account for forfeitures as they occur. This change did not have a material impact on the financial statements.

Effective January 1, 2018, the company will adopt the amended guidance in ASC Topic 230, *Statement of Cash Flows: Restricted Cash*, which requires amounts generally described as restricted cash and restricted cash equivalents to be included with cash and cash equivalents when reconciling the beginning-of-period and end-of-period total amounts shown on the statement of cash flows. The amended guidance will be applied retrospectively.

Effective January 1, 2018, the company will adopt the amended guidance in ASC Topic 606, *Revenue from Contracts with Customers*. ASC Topic 606 is designed to create improved revenue recognition and disclosure comparability in financial statements. The provisions of ASC Topic 606 include a five-step process by which an entity will determine revenue recognition, depicting the transfer of goods or services to customers in amounts which reflect the payment an entity expects to be entitled to in exchange for goods or services. The new guidance requires the company to apply the following steps: (1) identify the contract with the customer; (2) identify the performance obligations in the contract; (3) determine the transaction price; (4) allocate the transaction price to the performance obligations in the contract; and (5) recognize revenue when, or as, the company satisfies the performance obligation. In addition, ASC Topic 606 requires certain disclosures about contracts with customers and provides comprehensive guidance for transactions such as service revenue, contract modifications and multiple-element arrangements. The new standard is effective for fiscal years and interim periods within those years, beginning after December 15, 2017, and allows for early adoption.

The company completed a comparison of the current revenue recognition policies to ASC Topic 606 requirements for each of the company's major revenue categories. Results indicate that the amended guidance will not materially change the amount or timing of revenues recognized by the company and the majority of the company's contracts will continue to be recognized at a point in time and that the number of performance obligations and the accounting for variable consideration are not expected to be significantly different from current practice. In addition, many of the company's sales contracts are considered derivatives under ASC Topic 815, *Derivatives and Hedging*, and are therefore excluded from the scope of Topic 606. ASC Topic 606 also requires disclosure of significant changes in contract asset and contract liability balances between periods and the amount of the transaction price allocated to performance obligations that are unsatisfied or partially unsatisfied as of the end of the reporting period, when applicable. ASC Topic 606 may be adopted retrospectively to each prior reporting period presented or as a cumulative-effect adjustment as of the date of adoption. The company anticipates adopting the amended guidance using the modified retrospective transition method.

Effective January 1, 2018, the company will adopt the amended guidance in ASC Topic 740, *Income Taxes: Intra-Entity Transfers of Assets other than Inventory*, which requires the recognition of current and deferred income tax consequences of an intra-entity transfer of an asset other than inventory when the transfer occurs. The amended guidance will be applied on a modified retrospective basis, with a cumulative-effect adjustment to retained earnings as of the beginning of the year of adoption.

Effective January 1, 2018, the company will adopt the amended guidance in ASC Topic 805, *Business Combinations: Clarifying the Definition of a Business*, which clarifies the definition of a business with the objective of adding guidance to assist companies and other reporting organizations with evaluating whether transactions should be accounted for as acquisitions or disposals of assets or businesses. The amended guidance will be applied prospectively.

Effective January 1, 2019, the company will adopt the amended guidance in ASC Topic 842, *Leases*, which aims to make leasing activities more transparent and comparable, requiring substantially all leases to be recognized by lessees on the balance sheet as a right-of-use asset and corresponding lease liability, including leases currently accounted for as operating leases. The new standard is effective for fiscal years beginning after December 15, 2018 and interim periods within those years, and allows for early adoption. The company has established an implementation team to evaluate the impact of the new standard. The new standard will significantly increase right-of-use assets and lease liabilities on the company's consolidated balance sheet, primarily due to operating leases that are currently not recognized on the balance sheet. The company anticipates adopting the amended guidance using the modified retrospective transition method.

Effective January 1, 2019, the amended guidance in ASC Topic 815, *Derivatives and Hedging: Targeted Improvements to Accounting for Hedging Activities*, becomes effective. ASC Topic 815 is designed to improve the alignment of risk management activities and financial reporting for hedging relationships through changes to both the designation and measurement guidance for qualifying hedging relationships and the presentation of hedging results. The provisions of Topic 815 expand and refine hedge accounting for both nonfinancial and financial risk components and align the recognition and presentation of the effects of the hedging instrument and the hedged item in the financial statements. For cash flow and net investment hedges existing at the date of adoption, an entity should apply a cumulative-effect adjustment related to

eliminating the separate measurement of ineffectiveness to accumulated other comprehensive income with a corresponding adjustment to the opening balance of retained earnings as of the beginning of the fiscal year that an entity adopts the amendments in this update. Early adoption is permitted and the amended presentation and disclosure guidance is required only prospectively. Based on the company's initial assessment, no material changes are anticipated and the company intends to implement the amended guidance in ASC Topic 815 in either the fourth quarter of fiscal 2017 or the first quarter of fiscal 2018.

Effective January 1, 2020, the company will adopt the amended guidance in ASC Topic 350, *Intangibles – Goodwill and Other: Simplifying the Test for Goodwill Impairment*, which simplifies the measurement of goodwill by eliminating Step 2 from the goodwill impairment test. The annual goodwill impairment test will be performed by comparing the fair value of a reporting unit with its carrying amount. An impairment charge equal to the amount by which the carrying amount exceeds the reporting unit's fair value, not to exceed the total amount of goodwill allocated to that reporting unit, would be recognized. The amended guidance will be applied prospectively.

## 2. ACQUISITIONS

*Acquisition of Cattle Feedlots*

On May 16, 2017, the company acquired two cattle-feeding operations from Cargill Cattle Feeders, LLC for $57.7 million, including certain working capital adjustments. The transaction included the feed yards located in Leoti, Kansas and Yuma, Colorado, which added combined feedlot capacity of 155,000 head of cattle to the company's operations. The transaction was financed using cash on hand. There were no material acquisition costs recorded for the acquisition.

As part of the transaction, the company also entered into a long-term cattle supply agreement with Cargill Meat Solutions Corporation. Under the cattle supply agreement, all cattle placed in the Leoti, Yuma and the company's existing Kismet, Kansas feedlots will be sold exclusively to Cargill Meat Solutions under an agreed upon pricing arrangement.

The purchase price allocation is based on the preliminary results of internal valuations. The purchase price and purchase price allocation are preliminary until contractual post-closing working capital adjustments and valuations are finalized.

The following is a summary of the preliminary purchase price of assets acquired and liabilities assumed (in thousands):

| | Amounts of Identifiable Assets Acquired and Liabilities Assumed | |
|---|---|---|
| Inventory | $ | 20,576 |
| Prepaid expenses and other | | 52 |
| Property and equipment, net | | 37,205 |
| | | |
| Current liabilities | | (180) |
| Total identifiable net assets | $ | 57,653 |

*Acquisition of Fleischmann's Vinegar Company*

On October 3, 2016, the company acquired all of the issued and outstanding stock of SCI Ingredients Holdings, Inc., the holding company of Fleischmann's Vinegar Company, Inc., for $258.3 million in cash. A portion of the purchase price was used to repay existing debt. Fleischmann's Vinegar is one of the world's largest producers of food-grade industrial vinegar.

The following is a summary of assets acquired and liabilities assumed (in thousands):

**Amounts of Identifiable Assets Acquired and Liabilities Assumed**

| | | |
|---|---|---|
| Cash | $ | 4,148 |
| Inventory | | 9,308 |
| Accounts receivable, net | | 13,919 |
| Prepaid expenses and other | | 1,054 |
| Property and equipment | | 49,175 |
| Intangible assets | | 90,500 |
| | | |
| Current liabilities | | (9,689) |
| Income taxes payable | | (216) |
| Deferred tax liabilities | | (41,882) |
| Total identifiable net assets | | 116,317 |
| | | |
| Goodwill | | 142,002 |
| Purchase price | $ | 258,319 |

The amounts above reflect the final purchase price allocation. As of September 30, 2017, based on the final valuations, assets acquired and liabilities assumed were adjusted from the prior quarter to reflect an increase in the fair value of property and equipment of $6.2 million, a decrease in accumulated depreciation of $0.5 million, a decrease in the fair value of intangible assets of $4.0 million, a decrease in accumulated amortization of $0.3 million, a decrease in the fair value of goodwill of $0.8 million, a decrease of $0.1 million in income taxes payable and an increase in deferred tax liabilities of $1.5 million.

As of September 30, 2017, based on the final valuations, the company's customer relationship intangible asset recognized in connection with the Fleischmann's acquisition is $74.7 million, net of $5.3 million of accumulated amortization, and has a remaining 14-year weighted-average amortization period. As of September 30, 2017, the company also has an indefinite-lived trade name intangible asset of $10.5 million. The company recognized $1.1 million and $3.9 million of amortization expense associated with the amortizing customer relationship intangible asset during the three and nine months ended September 30, 2017, respectively, and expects estimated amortization expense for the next five years of $5.6 million per annum. The excess purchase price over the intangibles fair values was allocated to goodwill, none of which is expected to be deductible for tax purposes. The goodwill is primarily attributable to the synergies expected to arise after the acquisition.

*Acquisition of Ethanol Plants*

On September 23, 2016, the company acquired three ethanol plants located in Madison, Illinois, Mount Vernon, Indiana, and York, Nebraska from subsidiaries of Abengoa S.A. for approximately $234.9 million for the ethanol plant assets, and $19.1 million for working capital acquired and liabilities assumed. These ethanol facilities have a combined annual production capacity of approximately 230 mmgy.

The following is a summary of assets acquired and liabilities assumed (in thousands):

| | Amounts of Identifiable Assets Acquired and Liabilities Assumed |
| --- | --- |
| Inventory | $ 16,904 |
| Accounts receivable, net | 1,826 |
| Prepaid expenses and other | 2,224 |
| Property and equipment, net | 234,947 |
| Other assets | 3,885 |
| | |
| Current maturities of long-term debt | (406) |
| Current liabilities | (2,580) |
| Long-term debt | (2,763) |
| Total identifiable net assets | $ 254,037 |

The amounts above reflect the final purchase price allocation, which did not change materially from the initial allocation.

Concurrently with the company's acquisition of the Abengoa ethanol plants, on September 23, 2016, the partnership acquired the storage assets of the Abengoa ethanol plants from the company for $90.0 million in a transfer between entities under common control and entered into amendments to the related commercial agreements with Green Plains Trade.

**3. FAIR VALUE DISCLOSURES**

The following methods, assumptions and valuation techniques were used to estimate the fair value of the company's financial instruments:

Level 1 – unadjusted quoted prices in active markets for identical assets or liabilities the company can access at the measurement date. Level 1 unrealized gains and losses on commodity derivatives relate to exchange-traded open trade equity and option values in the company's brokerage accounts.

Level 2 – directly or indirectly observable inputs such as quoted prices for similar assets or liabilities in active markets other than quoted prices included within Level 1, quoted prices for identical or similar assets in markets that are not active, and other inputs that are observable or can be substantially corroborated by observable market data through correlation or other means. Grain inventories held for sale in the agribusiness segment are valued at nearby futures values, plus or minus nearby basis.

Level 3 – unobservable inputs that are supported by little or no market activity and comprise a significant component of the fair value of the assets or liabilities. The company currently does not have any recurring Level 3 financial instruments.

There have been no changes in valuation techniques and inputs used in measuring fair value. The company's assets and liabilities by level are as follows (in thousands):

| | Fair Value Measurements at September 30, 2017 | | | |
|---|---|---|---|---|
| | Quoted Prices in Active Markets for Identical Assets (Level 1) | Significant Other Observable Inputs (Level 2) | Reclassification for Balance Sheet Presentation | Total |
| Assets: | | | | |
| Cash and cash equivalents | $ 261,588 | $ - | $ - | $ 261,588 |
| Restricted cash | 30,773 | - | - | 30,773 |
| Margin deposits | 52,527 | - | (52,527) | - |
| Inventories carried at market | - | 114,410 | - | 114,410 |
| Unrealized gains on derivatives | 14,690 | 5,061 | 31,812 | 51,563 |
| Other assets | 115 | - | - | 115 |
| Total assets measured at fair value | $ 359,693 | $ 119,471 | $ (20,715) | $ 458,449 |
| Liabilities: | | | | |
| Accounts payable (1) | $ - | $ 31,377 | $ - | $ 31,377 |
| Unrealized losses on derivatives | 20,715 | 12,004 | (20,715) | 12,004 |
| Other | - | 15 | - | 15 |
| Total liabilities measured at fair value | $ 20,715 | $ 43,396 | $ (20,715) | $ 43,396 |

| | Fair Value Measurements at December 31, 2016 | | | |
|---|---|---|---|---|
| | Quoted Prices in Active Markets for Identical Assets (Level 1) | Significant Other Observable Inputs (Level 2) | Reclassification for Balance Sheet Presentation | Total |
| Assets: | | | | |
| Cash and cash equivalents | $ 304,211 | $ - | $ - | $ 304,211 |
| Restricted cash | 51,979 | - | - | 51,979 |
| Margin deposits | 50,601 | - | (50,601) | - |
| Inventories carried at market (2) | - | 154,022 | - | 154,022 |
| Unrealized gains on derivatives | 8,272 | 14,818 | 24,146 | 47,236 |
| Other assets | 116 | - | - | 116 |
| Total assets measured at fair value | $ 415,179 | $ 168,840 | $ (26,455) | $ 557,564 |
| Liabilities: | | | | |
| Accounts payable (1) | $ - | $ 35,288 | $ - | $ 35,288 |
| Unrealized losses on derivatives | 26,455 | 8,916 | (26,455) | 8,916 |
| Other liabilities | - | 81 | - | 81 |
| Total liabilities measured at fair value | $ 26,455 | $ 44,285 | $ (26,455) | $ 44,285 |

(1) Accounts payable is generally stated at historical amounts with the exception of $31.4 million and $35.3 million at September 30, 2017 and December 31, 2016, respectively, related to certain delivered inventory subject to changes in commodity prices. These payables are hybrid financial instruments for which the company has elected the fair value option.

(2) Inventories carried at market have been revised from previously reported results to include $77.0 million of inventories held under a fair value hedging relationship. There was no impact to the financial statements resulting from this revision.

The company believes the fair value of its debt was approximately $1.3 billion compared with a book value of $1.3 billion at September 30, 2017, and approximately $1.1 billion compared with a book value of $1.1 billion at December 31, 2016. The company estimated the fair value of its outstanding debt using Level 2 inputs. The company believes the fair values of its accounts receivable approximated book value, which was $115.0 million and $147.5 million at September 30, 2017, and December 31, 2016, respectively.

Although the company currently does not have any recurring Level 3 financial measurements, the fair values of tangible assets and goodwill acquired and the equity component of convertible debt issued represent Level 3 measurements that were

derived using a combination of the income approach, market approach and cost approach for the specific assets or liabilities being valued.

**4. SEGMENT INFORMATION**

As a result of acquisitions during 2016, the company implemented organizational segment changes during the fourth quarter of 2016, whereby the company management now reports the financial and operating performance in the following four operating segments: (1) ethanol production, which includes the production of ethanol, distillers grains and corn oil, (2) agribusiness and energy services, which includes grain handling and storage and marketing and merchant trading for company-produced and third-party ethanol, distillers grains, corn oil, natural gas and other commodities, (3) food and ingredients, which includes cattle feedlots, vinegar production and food-grade corn oil operations and (4) partnership, which includes fuel storage and transportation services. Prior periods have been reclassified to conform to the revised segment presentation.

The company has re-evaluated the profitability measure of its reportable segments' operating performance and has determined that segment EBITDA (earnings before interest, taxes, depreciation and amortization) is primarily used by the company's management to evaluate segment operating activities, and therefore is a more meaningful profitability measure than the previously reported segment operating income. In addition, EBITDA is a financial measure that is widely used by analysts and investors in the company's industries. As a result, the company is now including segment EBITDA as a performance measure.

Corporate activities include selling, general and administrative expenses, consisting primarily of compensation, professional fees and overhead costs not directly related to a specific operating segment.

During the normal course of business, the operating segments conduct business with each other. For example, the agribusiness and energy services segment procures grain and natural gas and sells products, including ethanol, distillers grains and corn oil for the ethanol production segment. The partnership segment provides fuel storage and transportation services for the agribusiness and energy services segment. These intersegment activities are treated like third-party transactions with origination, marketing and storage fees charged at estimated market values. Consequently, these transactions affect segment performance; however, they do not impact the company's consolidated results since the revenues and corresponding costs are eliminated.

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

| | Three Months Ended September 30, | | Nine Months Ended September 30, | |
|---|---|---|---|---|
| | 2017 | 2016 | 2017 | 2016 |
| Revenues: | | | | |
| Ethanol production: | | | | |
| Revenues from external customers | $ 620,180 | $ 586,988 | $ 1,857,356 | $ 1,710,484 |
| Intersegment revenues | 3,579 | - | 6,624 | - |
| Total segment revenues | 623,759 | 586,988 | 1,863,980 | 1,710,484 |
| Agribusiness and energy services: | | | | |
| Revenues from external customers | 164,604 | 168,143 | 483,670 | 531,445 |
| Intersegment revenues | 14,406 | 8,936 | 33,679 | 24,934 |
| Total segment revenues | 179,010 | 177,079 | 517,349 | 556,379 |
| Food and ingredients: | | | | |
| Revenues from external customers | 114,750 | 84,655 | 329,432 | 230,812 |
| Intersegment revenues | 38 | 37 | 113 | 112 |
| Total segment revenues | 114,788 | 84,692 | 329,545 | 230,924 |
| Partnership: | | | | |
| Revenues from external customers | 1,701 | 2,066 | 4,724 | 6,042 |
| Intersegment revenues | 24,748 | 24,139 | 74,019 | 69,445 |
| Total segment revenues | 26,449 | 26,205 | 78,743 | 75,487 |
| Revenues including intersegment activity | 944,006 | 874,964 | 2,789,617 | 2,573,274 |
| Intersegment eliminations | (42,771) | (33,112) | (114,435) | (94,491) |
| Revenues as reported | $ 901,235 | $ 841,852 | $ 2,675,182 | $ 2,478,783 |

| | Three Months Ended September 30, | | Nine Months Ended September 30, | |
|---|---|---|---|---|
| | 2017 | 2016 | 2017 | 2016 |
| Cost of goods sold: | | | | |
| Ethanol production | $ 590,904 | $ 549,705 | $ 1,802,688 | $ 1,649,641 |
| Agribusiness and energy services | 168,735 | 163,643 | 487,239 | 518,135 |
| Food and ingredients | 98,854 | 78,792 | 281,898 | 219,087 |
| Partnership | - | - | - | - |
| Intersegment eliminations | (42,706) | (33,257) | (114,123) | (93,769) |
| | $ 815,787 | $ 758,883 | $ 2,457,702 | $ 2,293,094 |

| | Three Months Ended September 30, | | Nine Months Ended September 30, | |
|---|---|---|---|---|
| | 2017 | 2016 | 2017 | 2016 |
| EBITDA: | | | | |
| Ethanol production | $ 25,570 | $ 30,155 | $ 38,521 | $ 39,164 |
| Agribusiness and energy services | 5,150 | 6,310 | 15,910 | 21,246 |
| Food and ingredients | 13,272 | 5,465 | 39,741 | 10,430 |
| Partnership | 17,589 | 16,620 | 51,549 | 47,241 |
| Intersegment eliminations | 8 | (39) | (147) | (1,174) |
| Corporate activities | (11,212) | (9,439) | (27,275) | (25,944) |
| | $ 50,377 | $ 49,072 | $ 118,299 | $ 90,963 |

| | Three Months Ended September 30, | | Nine Months Ended September 30, | |
|---|---|---|---|---|
| | 2017 | 2016 | 2017 | 2016 |
| Depreciation and amortization: | | | | |
| Ethanol production | $ 20,959 | $ 15,725 | $ 61,443 | $ 46,655 |
| Agribusiness and energy services | 1,457 | 628 | 2,776 | 1,882 |
| Food and ingredients | 3,139 | 257 | 9,259 | 802 |
| Partnership | 1,280 | 1,515 | 3,781 | 4,220 |
| Corporate activities | 999 | 1,161 | 2,846 | 2,573 |
| | $ 27,834 | $ 19,286 | $ 80,105 | $ 56,132 |

The following table reconciles net income to EBITDA for the periods indicated (in thousands):

| | Three Months Ended September 30, | | Nine Months Ended September 30, | |
|---|---|---|---|---|
| | 2017 | 2016 | 2017 | 2016 |
| Net income | $ 39,429 | $ 12,884 | $ 29,284 | $ 6,053 |
| Interest expense | 31,889 | 11,819 | 69,815 | 33,117 |
| Income tax expense (benefit) | (48,775) | 5,083 | (60,905) | (4,339) |
| Depreciation and amortization | 27,834 | 19,286 | 80,105 | 56,132 |
| EBITDA | $ 50,377 | $ 49,072 | $ 118,299 | $ 90,963 |

The following table sets forth third-party revenues by product line (in thousands):

| | Three Months Ended September 30, | | Nine Months Ended September 30, | |
|---|---|---|---|---|
| | 2017 | 2016 | 2017 | 2016 |
| Revenues: | | | | |
| Ethanol | $ 625,787 | $ 550,724 | $ 1,830,887 | $ 1,622,168 |
| Distillers grains | 97,136 | 129,345 | 303,527 | 357,070 |
| Corn oil | 33,678 | 49,844 | 121,166 | 111,727 |
| Grain | 19,338 | 30,003 | 73,860 | 145,800 |
| Food and ingredients | 112,697 | 70,012 | 305,211 | 201,423 |
| Service revenues | 1,701 | 2,066 | 4,724 | 6,042 |
| Other | 10,898 | 9,858 | 35,807 | 34,553 |
| | $ 901,235 | $ 841,852 | $ 2,675,182 | $ 2,478,783 |

The following table sets forth total assets by operating segment (in thousands):

| | September 30, 2017 | December 31, 2016 |
|---|---|---|
| Total assets (1): | | |
| Ethanol production | $ 1,137,903 | $ 1,206,155 |
| Agribusiness and energy services | 467,955 | 579,977 |
| Food and ingredients | 691,663 | 406,429 |
| Partnership | 72,965 | 74,999 |
| Corporate assets | 272,844 | 257,652 |
| Intersegment eliminations | (14,793) | (18,720) |
| | $ 2,628,537 | $ 2,506,492 |

(1) Asset balances by segment exclude intercompany receivable balances.

## 5. INVENTORIES

Inventories are carried at lower of cost or net realizable value, except for commodities held for sale and fair-value hedged inventories. Commodities held for sale are reported at market value.

The components of inventories are as follows (in thousands):

| | September 30, 2017 | December 31, 2016 |
|---|---|---|
| Finished goods | $ 123,860 | $ 99,009 |
| Commodities held for sale | 42,783 | 65,926 |
| Raw materials | 128,072 | 135,516 |
| Work-in-process | 283,936 | 91,093 |
| Supplies and parts | 33,796 | 30,637 |
| | $ 612,447 | $ 422,181 |

## 6. GOODWILL

Changes in carrying amount of goodwill attributable to each business segment for the nine months ended September 30, 2017, were as follows (in thousands):

| | Ethanol Production Production | Food and Food Ingredients | Partnership | Total |
|---|---|---|---|---|
| Balance, December 31, 2016 | $ 30,279 | $ 142,819 | $ 10,598 | $ 183,696 |
| Adjustment to preliminary Fleischmann's Vinegar Valuation | - | (817) | - | (817) |
| Balance, September 30, 2017 | $ 30,279 | $ 142,002 | $ 10,598 | $ 182,879 |

As of September 30, 2017, based on the final valuations in connection with the Fleischmann's acquisition, the fair value of goodwill was reduced by $0.8 million.

## 7. DERIVATIVE FINANCIAL INSTRUMENTS

At September 30, 2017, the company's consolidated balance sheet reflected unrealized losses of $13.6 million, net of tax, in accumulated other comprehensive loss. The company expects these losses will be reclassified in operating income over the next 12 months as a result of hedged transactions that are forecasted to occur. The amount realized in operating income will differ as commodity prices change.

*Fair Values of Derivative Instruments*

The fair values of the company's derivative financial instruments and the line items on the consolidated balance sheets where they are reported are as follows (in thousands):

| | Asset Derivatives' Fair Value | | Liability Derivatives' Fair Value | |
|---|---|---|---|---|
| | September 30, 2017 | December 31, 2016 | September 30, 2017 | December 31, 2016 |
| Derivative financial instruments (1) | $ 5,061 | $ 14,818 (3) | $ - | $ - |
| Accrued and other liabilities | - | - | 18,029 (2) | 27,099 |
| Other liabilities | - | - | 15 | 81 |
| Total | $ 5,061 | $ 14,818 | $ 18,044 | $ 27,180 |

(1) Derivative financial instruments as reflected on the consolidated balance sheets include related margin deposit assets of $52.5 million and $50.6 million at September 30, 2017 and December 31, 2016, respectively.
(2) Balance at September 30, 2017 includes $15.7 million of net unrealized losses on derivative financial instruments designated as cash flow hedging instruments.
(3) Balance at December 31, 2016 includes $17.0 million of net unrealized losses on derivative financial instruments designated as cash flow hedging instruments.

Refer to *Note 3 - Fair Value Disclosures*, which contains fair value information related to derivative financial instruments.

*Effect of Derivative Instruments on Consolidated Statements of Operations and Consolidated Statements of Stockholders' Equity and Comprehensive Income*

The gains or losses recognized in income and other comprehensive income (loss) related to the company's derivative financial instruments and the line items on the consolidated financial statements where they are reported are as follows (in thousands):

| Gains (Losses) on Derivative Instruments Not Designated in a Hedging Relationship | Three Months Ended September 30, 2017 | Three Months Ended September 30, 2016 | Nine Months Ended September 30, 2017 | Nine Months Ended September 30, 2016 |
|---|---|---|---|---|
| Revenues | $ 2,863 | $ (1,084) | $ (7,400) | $ 6,187 |
| Cost of goods sold | 2,036 | (39) | 17,256 | (8,740) |
| Net increase (decrease) recognized in earnings before tax | $ 4,899 | $ (1,123) | $ 9,856 | $ (2,553) |

| Gains (Losses) Due to Ineffectiveness of Cash Flow Hedges | Three Months Ended September 30, 2017 | Three Months Ended September 30, 2016 | Nine Months Ended September 30, 2017 | Nine Months Ended September 30, 2016 |
|---|---|---|---|---|
| Revenues | $ (48) | $ 34 | $ (229) | $ (5) |
| Cost of goods sold | (213) | 96 | (213) | (65) |
| Net increase (decrease) recognized in earnings before tax | $ (261) | $ 130 | $ (442) | $ (70) |

| Gains (Losses) Reclassified from Accumulated Other Comprehensive Income (Loss) into Net Income | Three Months Ended September 30, 2017 | Three Months Ended September 30, 2016 | Nine Months Ended September 30, 2017 | Nine Months Ended September 30, 2016 |
|---|---|---|---|---|
| Revenues | $ (5,242) | $ 25,254 | $ 1,734 | $ 12,029 |
| Cost of goods sold | (1,861) | (28,548) | (1,679) | (15,904) |
| Net increase (decrease) recognized in earnings before tax | $ (7,103) | $ (3,294) | $ 55 | $ (3,875) |

| Effective Portion of Cash Flow Hedges Recognized in Other Comprehensive Income (Loss) | Three Months Ended September 30, 2017 | Three Months Ended September 30, 2016 | Nine Months Ended September 30, 2017 | Nine Months Ended September 30, 2016 |
|---|---|---|---|---|
| Commodity Contracts | $ (12,235) | $ 3,250 | $ (15,069) | $ (2,157) |

| Gains (Losses) from Fair Value Hedges of Inventory | Three Months Ended September 30, 2017 | Three Months Ended September 30, 2016 | Nine Months Ended September 30, 2017 | Nine Months Ended September 30, 2016 |
|---|---|---|---|---|
| Revenues (effect of change in inventory value) | $ 61 | $ (40) | $ 1,451 | $ 1,379 |
| Cost of goods sold (effect of change in inventory value) | (1,775) | (470) | (6,229) | 7,712 |
| Revenues (effect of fair value hedge) | (61) | 40 | (1,734) | (1,379) |
| Cost of goods sold (effect of fair value hedge) | 3,085 | 918 | 8,530 | (7,648) |
| Ineffectiveness recognized in earnings before tax | $ 1,310 | $ 448 | $ 2,018 | $ 64 |

There were no gains or losses from discontinuing cash flow or fair value hedge treatment during the three and nine months ended September 30, 2017 and 2016.

The open commodity derivative positions as of September 30, 2017, are as follows (in thousands):

| | September 30, 2017 | | | | |
|---|---|---|---|---|---|
| | Exchange Traded | Non-Exchange Traded | | | |
| Derivative Instruments | Net Long & (Short) (1) | Long (2) | (Short) (2) | Unit of Measure | Commodity |
| Futures | (39,030) | | | Bushels | Corn, Soybeans and Wheat |
| Futures | 67,775 (3) | | | Bushels | Corn |
| Futures | (13,175)(4) | | | Bushels | Corn |
| Futures | 9,828 | | | Gallons | Ethanol |
| Futures | (285,852)(3) | | | Gallons | Ethanol |
| Futures | 1,745 | | | MmBTU | Natural Gas |
| Futures | (13,753)(4) | | | MmBTU | Natural Gas |
| Futures | (7,200) | | | Pounds | Livestock |
| Futures | (336,300)(3) | | | Pounds | Livestock |
| Futures | 40 | | | Barrels | Crude Oil |
| Futures | (293)(4) | | | Barrels | Crude Oil |
| Futures | (420) | | | Pounds | Soybean Oil |
| Futures | 5,838 (3) | | | Gallons | Natural Gasoline |
| Options | (1,010) | | | Bushels | Corn, Soybeans and Wheat |
| Options | 2,156 | | | Gallons | Ethanol |
| Options | (3,456) | | | Pounds | Livestock |
| Options | (1,032) | | | Pounds | Soybean Oil |
| Options | 29 | | | Barrels | Crude Oil |
| Forwards | | 17,166 | (247) | Bushels | Corn and Soybeans |
| Forwards | | 53,872 | (336,067) | Gallons | Ethanol |
| Forwards | | 173 | (375) | Tons | Distillers Grains |
| Forwards | | 14,367 | (92,344) | Pounds | Corn Oil |
| Forwards | | 14,862 | (1,036) | MmBTU | Natural Gasoline |
| Forwards | | 712 | (412) | Barrels | Crude Oil |

(1) Exchange traded futures and options are presented on a net long and (short) position basis. Options are presented on a delta-adjusted basis.
(2) Non-exchange traded forwards are presented on a gross long and (short) position basis including both fixed-price and basis contracts.
(3) Futures used for cash flow hedges.
(4) Futures or non-exchange traded forwards used for fair value hedges.

Energy trading contracts that do not involve physical delivery are presented net in revenues on the consolidated statements of operations. Included in revenues are net gains on energy trading contracts of $3.1 million and $18.3 million for the three and nine months ended September 30, 2017, respectively, and net gains of $2.7 million and $5.7 million for the three and nine months ended September 30, 2016, respectively.

## 8. DEBT

The components of long-term debt are as follows (in thousands):

| | September 30, 2017 | December 31, 2016 |
|---|---|---|
| Corporate: | | |
| $500.0 million term loan | $ 487,440 | $ - |
| $120.0 million convertible notes due 2018 | 60,241 | 108,817 |
| $170.0 million convertible notes due 2022 | 131,752 | 127,239 |
| Green Plains Partners: | | |
| $155.0 million revolving credit facility | 129,000 | 129,000 |
| Green Plains Processing: | | |
| $345.0 million term loan | - | 294,011 |
| Fleischmann's Vinegar: | | |
| $130.0 million term loan | - | 125,609 |
| $15.0 million revolving credit facility | - | 4,000 |
| Other | 27,976 | 28,993 |
| Total long-term debt | 836,409 | 817,669 |
| Less: current portion of long-term debt | (6,486) | (35,059) |
| Long-term debt | $ 829,923 | $ 782,610 |

Short-term notes payable and other borrowings at September 30, 2017, include working capital revolvers at Green Plains Cattle, Green Plains Grain and Green Plains Trade with outstanding balances of $246.7 million, $64.0 million and $143.3 million, respectively. Green Plains Grain also had $3.7 million in outstanding short-term inventory financing arrangements at September 30, 2017. Short-term notes payable and other borrowings at December 31, 2016, include working capital revolvers at Green Plains Cattle, Green Plains Grain and Green Plains Trade with outstanding balances of $63.5 million, $102.0 million and $125.7 million, respectively.

*Corporate Activities*

In August 2016, the company issued $170.0 million of 4.125% convertible senior notes due 2022. The 4.125% notes are senior, unsecured obligations of the company, with interest payable on March 1 and September 1 of each year. The company may settle the 4.125% notes in cash, common stock or a combination of cash and common stock.

Prior to March 1, 2022, the 4.125% notes are not convertible unless certain conditions are satisfied. The conversion rate is subject to adjustment upon the occurrence of certain events, including when the quarterly cash dividend exceeds $0.12 per share and upon redemption of the 4.125% notes. The initial conversion rate is 35.7143 shares of common stock per $1,000 of principal, which is equal to a conversion price of approximately $28.00 per share.

The company may redeem all, but not less than all, of the 4.125% notes at any time on or after September 1, 2020, if the company's common stock equals or exceeds 140% of the applicable conversion price for a specified time period ending on the trading day immediately prior to the date the company delivers notice of the redemption. The redemption price will equal 100% of the principal plus any accrued and unpaid interest. Holders of the 4.125% notes have the option to require the company to repurchase the 4.125% notes in cash at a price equal to 100% of the principal plus accrued and unpaid interest when there is a fundamental change, such as change in control. If an event of default occurs, it could result in the 4.125% notes being declared due and payable.

In September 2013, the company issued $120.0 million of 3.25% convertible senior notes due October 1, 2018. The 3.25% notes are senior, unsecured obligations of the company, with interest payable on April 1 and October 1 of each year. The company may settle the 3.25% notes in cash, common stock or a combination of cash and common stock.

Prior to April 1, 2018, the 3.25% notes are not convertible unless certain conditions are satisfied. The conversion rate is subject to adjustment when the quarterly cash dividend exceeds $0.04 per share. The conversion rate was recently adjusted to 49.9981 shares of common stock per $1,000 of principal, which is equal to a conversion price of approximately $20.00 per share. The company may be obligated to increase the conversion rate in certain events, including redemption of the 3.25% notes.

The company may redeem all of the 3.25% notes at any time, if the company's common stock equals or exceeds 140% of the applicable conversion price for a specified time period ending on the trading day immediately prior to the date the company delivers notice of the redemption. The redemption price will equal 100% of the principal plus any accrued and unpaid interest. Holders of the 3.25% notes have the option to require the company to repurchase the 3.25% notes in cash at a price equal to 100% of the principal plus accrued and unpaid interest when there is a fundamental change, such as change in control. If an event of default occurs, it could result in the 3.25% notes being declared due and payable.

During the second quarter of 2017, the company entered into several privately negotiated agreements with holders, on behalf of certain beneficial owners of the company's 3.25% notes. Under these agreements, 2,783,725 shares of the company's common stock and approximately $8.5 million in cash plus accrued but unpaid interest on the 3.25% notes, were exchanged for approximately $56.3 million in aggregate principal amount of the 3.25% notes. Common stock held as treasury shares were exchanged for the 3.25% notes. Following the closings of the agreements, $63.7 million aggregate principal amount of the 3.25% notes remain outstanding.

At issuance, the company separately accounted for the liability and equity components of the convertible notes by bifurcating the gross proceeds between the indebtedness, or liability component, and the embedded conversion option, or equity component. This bifurcation was done by estimating an effective interest rate on the date of issuance for similar notes. The embedded conversion option was recorded in stockholders' equity. Since the company did not exercise the embedded conversion option associated with the notes, pursuant to the guidance within ASC Topic 470, *Debt*, the company recorded a loss upon extinguishment measured by the difference between the fair value and carrying value of the liability portion of the notes. As a result, the company recorded a charge to interest expense in the consolidated financial statements of approximately $1.3 million during the three months ended June 30, 2017. This charge included $0.6 million of unamortized debt issuance costs related to the principal balance extinguished. The remaining settlement consideration transferred was allocated to the reacquisition of the embedded conversion option and recognized as a reduction of additional paid-in capital.

On August 29, 2017, the company entered into a $500.0 million term loan agreement, which matures on August 29, 2023, to refinance approximately $405.0 million of total debt outstanding issued by Green Plains Processing and Fleischmann's Vinegar Company, pay associated fees and expenses and for general corporate purposes. The term loan is guaranteed by the company and substantially all of its subsidiaries, but not Green Plains Partners and certain other entities, and secured by substantially all of the assets of the company, including 17 ethanol production facilities, vinegar production facilities and a second priority lien on the assets secured under the revolving credit facilities at Green Plains Trade, Green Plains Cattle and Green Plains Grain.

The credit agreement contains certain customary representations and warranties, affirmative covenants, negative covenants, financial covenants and events of default. The negative covenants include restrictions on the ability to incur additional indebtedness, acquire and sell assets, create liens, make investments, make distributions and enter into transactions with affiliates. At the end of each fiscal quarter, the covenants of the credit agreement require the company to maintain a maximum term debt to total term capitalization of not more than 55% and a minimum interest coverage ratio of not less than 1.25x, as defined in the credit agreement. Beginning in 2018, the credit facility also has a provision requiring the company to make special annual payments of 50% or 75% of its available free cash flow, subject to certain limitations. Voluntary term loan prepayments are subject to prepayment fees of 1.0% if prepaid before the eighteen month anniversary of the credit agreement. Beginning in the fourth quarter of 2017, scheduled principal payments are $1.25 million until maturity. The term loan bears interest at a floating rate of a base rate plus a margin of 4.50% or LIBOR plus a margin of 5.50%.

*Ethanol Production Segment*

Green Plains Processing had a $345.0 million senior secured credit facility, which was guaranteed by the company and certain subsidiaries of Green Plains Processing and secured by the stock and substantially all of the assets of Green Plains Processing. The interest rate was LIBOR, subject to a 1.00% floor, plus 5.50% and was scheduled to mature on June 30, 2020. The terms of the credit facility required the borrower to maintain a maximum total leverage ratio of 4.00x at the end of each quarter, decreasing to 3.25x over the life of the credit facility, and a minimum fixed charge coverage ratio of 1.25x. This senior secured credit facility was extinguished in full on August 29, 2017 with the proceeds from the new $500.0 million secured term loan facility. In connection with the extinguishment of the senior secured credit facility, the company wrote off deferred financing fees of $5.9 million which were recorded as interest expense in the consolidated statement of operations during the three months ended September 30, 2017.

*Agribusiness and Energy Services Segment*

Green Plains Grain has a $125.0 million senior secured asset-based revolving credit facility, to finance working capital up to the maximum commitment based on eligible collateral equal to the sum of percentages of eligible cash, receivables and inventories, less miscellaneous adjustments. The credit facility matures on July 26, 2019. Advances are subject to an interest rate equal to LIBOR plus 3.00% or the lenders' base rate plus 2.00%. The credit facility also includes an accordion feature that enables the facility to be increased by up to $75.0 million with agent approval. The credit facility can also be increased by up to $50.0 million for seasonal borrowings. Total commitments outstanding cannot exceed $250.0 million.

Lenders receive a first priority lien on certain cash, inventory, accounts receivable and other assets owned by Green Plains Grain as security on the credit facility. The terms impose affirmative and negative covenants, including maintaining minimum working capital of $20.0 million and tangible net worth of $26.3 million for 2017. Capital expenditures are limited to $8.0 million per year under the credit facility, plus equity contributions from the company and unused amounts of up to $8.0 million from the previous year. In addition, the credit facility requires the company to maintain a minimum fixed charge coverage ratio of 1.25 to 1.00 and a maximum annual leverage ratio of 6.00 to 1.00 at the end of each quarter. The fixed charge coverage ratio and long-term capitalization ratio apply only if Green Plains Grain has long-term indebtedness on the date of calculation. As of September 30, 2017, Green Plains Grain had no long-term indebtedness. The credit facility also contains restrictions on distributions related to capital stock, with exceptions for distributions up to 50% of net profit before tax, subject to certain conditions.

Green Plains Trade has a senior secured asset-based revolving credit facility, which was amended on July 28, 2017, to increase the maximum commitment from $150 million to $300 million and extend the maturity date to July 28, 2022. The revolving credit facility finances working capital for marketing and distribution activities based on eligible collateral equal to the sum of percentages of eligible receivables and inventories, less miscellaneous adjustments. The amended $300 million maximum commitment consists of a $285 million credit facility and a $15 million first-in-last-out (FILO) credit facility. The amended credit facility also includes an accordion feature that enables the credit facility to be increased by up to $70.0 million with agent approval. Advances are subject to variable interest rates equal to daily LIBOR plus 2.25% on the credit facility and daily LIBOR plus 3.25% on the FILO credit facility. The total unused portion of the $300 million revolving credit facility is also subject to a commitment fee of 0.375% per annum.

The terms impose affirmative and negative covenants, including maintaining a fixed charge coverage ratio of 1.15x. Capital expenditures are limited to $1.5 million per year under the credit facility. The credit facility also restricts distributions related to capital stock, with an exception for distributions up to 50% of net income if, on a pro forma basis, (a) availability has been greater than $10.0 million for the last 30 days and (b) the borrower would be in compliance with the fixed charge coverage ratio on the distribution date.

At September 30, 2017, Green Plains Trade had restricted cash of $9.5 million on the consolidated balance sheet, the use of which was restricted for repayment towards the outstanding loan balance.

*Food and Ingredients Segment*

Green Plains Cattle has a $300.0 million senior secured asset-based revolving credit facility, which matures on April 30, 2020, to finance working capital for the cattle feedlot operations up to the maximum commitment based on eligible collateral equal to the sum of percentages of eligible receivables, inventories and other current assets, less miscellaneous adjustments. Advances, as amended, are subject to variable interest rates equal to LIBOR plus 2.00% to 3.00%, or the base rate plus 1.00% to 2.00%, depending upon the preceding three months' excess borrowing availability. The amended credit facility also includes an accordion feature that enables the credit facility to be increased by up to $100.0 million with agent approval. The unused portion of the credit facility is also subject to a commitment fee of 0.20% to 0.30% per annum, depending on the preceding three months' excess borrowing availability.

Lenders receive a first priority lien on certain cash, inventory, accounts receivable, property and equipment and other assets owned by Green Plains Cattle as security on the credit facility. The amended terms impose affirmative and negative covenants, including maintaining working capital of 15% of the commitment amount, tangible net worth of 20% of the commitment amount, plus 50% of net profit from the previous year, and a total debt to tangible net worth ratio of 3.50x. Capital expenditures are limited to $10.0 million per year under the credit facility, plus $10.0 million per year if funded by a contribution from parent, plus any unused amounts from the previous year.

Fleischmann's Vinegar had a $130.0 million senior secured term loan and a $15.0 million senior secured revolving credit facility, which was used to finance the purchase of Fleischmann's Vinegar and to fund working capital for its vinegar

manufacturing operations, and were scheduled to mature on October 3, 2022. Beginning January 1, 2017, the term loan was subject to mandatory prepayments based on the preceding fiscal year's excess cash flow. Term loan prepayments were generally subject to prepayment fees of 1.0% to 2.0% if prepaid before the second anniversary of the credit agreement. The term loan and loans under the revolving credit facility each bore interest at a floating rate based on the consolidated total net leverage ratio, adjusted quarterly beginning September 30, 2017, to either a base rate plus an applicable margin of 5.0% to 6.0% or to LIBOR plus an applicable margin of 6.0% to 7.0%. The unused portion of the revolving credit facility was also subject to a commitment fee of 0.5% per annum.

This senior secured credit term loan and senior secured revolving credit facility were extinguished in full on August 29, 2017 with the proceeds from the new $500.0 million secured term loan facility. In connection with the extinguishment of the senior secured credit facility, the company wrote off deferred financing fees of $3.5 million and paid a prepayment penalty of $2.9 million. These expenses are recorded as interest expense in the consolidated statement of operations during the three months ended September 30, 2017.

*Partnership Segment*

Green Plains Partners, through a wholly owned subsidiary, has a $155.0 million revolving credit facility, as amended, which matures on July 1, 2020, to fund working capital, acquisitions, distributions, capital expenditures and other general partnership purposes. Advances under the credit facility are subject to a floating interest rate based on the preceding fiscal quarter's consolidated leverage ratio at a base rate plus 1.25% to 2.00% or LIBOR plus 2.25% to 3.00%. The credit facility may be increased up to $100.0 million without the consent of the lenders. The unused portion of the credit facility is also subject to a commitment fee of 0.35% to 0.50%, depending on the preceding fiscal quarter's consolidated leverage ratio.

The partnership's obligations under the credit facility are secured by a first priority lien on (i) the capital stock of the partnership's present and future subsidiaries, (ii) all of the partnership's present and future personal property, such as investment property, general intangibles and contract rights, including rights under agreements with Green Plains Trade, and (iii) all proceeds and products of the equity interests of the partnership's present and future subsidiaries and its personal property. The terms impose affirmative and negative covenants including restricting the partnership's ability to incur additional debt, acquire and sell assets, create liens, invest capital, pay distributions and materially amend the partnership's commercial agreements with Green Plains Trade. The credit facility also requires the partnership to maintain a maximum consolidated net leverage ratio of no more than 3.50x, and a minimum consolidated interest coverage ratio of no less than 2.75x, each of which is calculated on a pro forma basis with respect to acquisitions and divestitures occurring during the applicable period.

*Covenant Compliance*

The company was in compliance with its debt covenants as of September 30, 2017.

*Capitalized Interest*

The company had $16 thousand and $39 thousand of capitalized interest during the three and nine months ended September 30, 2017, respectively, and $483 thousand and $1.4 million during the three and nine months ended September 30, 2016, respectively.

*Restricted Net Assets*

At September 30, 2017, there were approximately $124.5 million of net assets at the company's subsidiaries that could not be transferred to the parent company in the form of dividends, loans or advances due to restrictions contained in the credit facilities of these subsidiaries.

**9. STOCK-BASED COMPENSATION**

The company has an equity incentive plan that reserves 4,110,000 shares of common stock for issuance to its directors and employees. The plan provides for shares, including options to purchase shares of common stock, stock appreciation rights tied to the value of common stock, restricted stock, and restricted and deferred stock unit awards, to be granted to eligible employees, non-employee directors and consultants. The company measures stock-based compensation at fair value on the grant date. The company records noncash compensation expense related to equity awards in its consolidated financial statements over the requisite period on a straight-line basis. Substantially all of the existing stock-based compensation has been equity awards.

The activity related to the exercisable stock options for the nine months ended September 30, 2017, is as follows:

| | Shares | Weighted-Average Exercise Price | Weighted-Average Remaining Contractual Term (in years) | Aggregate Intrinsic Value (in thousands) |
|---|---|---|---|---|
| Outstanding at December 31, 2016 | 148,750 | $ 12.36 | 2.8 | $ 2,305 |
| Granted | - | - | - | - |
| Exercised | (5,000) | 10.00 | - | 78 |
| Forfeited | - | - | - | - |
| Expired | - | - | - | - |
| Outstanding at September 30, 2017 | 143,750 | $ 12.44 | 2.1 | $ 1,109 |
| Exercisable at September 30, 2017 (1) | 143,750 | $ 12.44 | 2.1 | $ 1,109 |

(1) Includes in-the-money options totaling 143,750 shares at a weighted-average exercise price of $12.44.

Option awards allow employees to exercise options through cash payment for the shares of common stock or simultaneous broker-assisted transactions in which the employee authorizes the exercise and immediate sale of the options in the open market. The company uses newly issued shares of common stock to satisfy its stock-based payment obligations.

The non-vested stock award and deferred stock unit activity for the nine months ended September 30, 2017, is as follows:

| | Non-Vested Shares and Deferred Stock Units | Weighted-Average Grant-Date Fair Value | Weighted-Average Remaining Vesting Term (in years) |
|---|---|---|---|
| Non-Vested at December 31, 2016 | 1,139,560 | $ 17.65 | |
| Granted | 566,165 | 24.03 | |
| Forfeited | (42,430) | 19.08 | |
| Vested | (542,764) | 18.37 | |
| Non-Vested at September 30, 2017 | 1,120,531 | $ 20.47 | 2.0 |

*Green Plains Partners*

Green Plains Partners has adopted the LTIP, an incentive plan intended to promote the interests of the partnership, its general partner and affiliates by providing incentive compensation based on units to employees, consultants and directors to encourage superior performance. The incentive plan reserves 2,500,000 common units for issuance in the form of options, restricted units, phantom units, distributable equivalent rights, substitute awards, unit appreciation rights, unit awards, profits interest units or other unit-based awards. The partnership measures unit-based compensation related to equity awards in its consolidated financial statements over the requisite service period on a straight-line basis.

The non-vested unit-based awards activity for the nine months ended September 30, 2017, is as follows:

| | Non-Vested Shares and Deferred Stock Units | Weighted-Average Grant-Date Fair Value | Weighted-Average Remaining Vesting Term (in years) |
|---|---|---|---|
| Non-Vested at December 31, 2016 | 15,009 | $ 15.99 | |
| Granted | 12,834 | 18.70 | |
| Forfeited | (4,278) | 18.70 | |
| Vested | (15,009) | 15.99 | |
| Non-Vested at September 30, 2017 | 8,556 | $ 18.70 | 0.8 |

Compensation costs for stock-based and unit-based payment plans during the three and nine months ended September 30, 2017, were approximately $3.3 million and $8.8 million, respectively, and $2.4 million and $7.0 million during the three and nine months ended September 30, 2016, respectively. At September 30, 2017, there was $16.2 million of

unrecognized compensation costs from stock-based and unit-based compensation related to non-vested awards. This compensation is expected to be recognized over a weighted-average period of approximately 2.0 years. The potential tax benefit related to stock-based payment is approximately 37.7% these expenses.

## 10. EARNINGS PER SHARE

Basic earnings per share, or EPS, is calculated by dividing net income available to common stockholders by the weighted average number of common shares outstanding during the period.

During 2016, diluted EPS was computed using the treasury stock method for the convertible debt instruments, by dividing net income by the weighted average number of common shares outstanding during the period, adjusted for the dilutive effect of the convertible debt instruments and any other outstanding dilutive securities. During the first quarter of 2017, the company changed its method for calculating dilutive EPS related to its convertible debt instruments from the treasury stock method to the if-converted method, as the company changed its financial strategy with respect to cash settlement of these instruments. As such, the company computed diluted EPS for 2017 by dividing net income on an if-converted basis, adjusted to add back net interest expense related to the convertible debt instruments, by the weighted average number of common shares outstanding during the period, adjusted to include the shares that would be issued if the convertible debt instruments were converted to common shares and the effect of any outstanding dilutive securities.

The basic and diluted EPS are calculated as follows (in thousands):

| | Three Months Ended September 30, | | Nine Months Ended September 30, | |
|---|---|---|---|---|
| | **2017** | **2016** | **2017** | **2016** |
| Basic EPS: | | | | |
| Net income (loss) attributable to Green Plains | $ 34,394 | $ 7,928 | $ 14,431 | $ (8,019) |
| Weighted average shares outstanding - basic | 41,348 | 38,282 | 40,008 | 38,301 |
| EPS - basic | $ 0.83 | $ 0.21 | $ 0.36 | $ (0.21) |
| | | | | |
| Diluted EPS: | | | | |
| Net income (loss) attributable to Green Plains | $ 34,394 | $ 7,928 | $ 14,431 | $ (8,019) |
| Interest and amortization on convertible debt, net of tax effect: | | | | |
| 3.25% notes | 840 | - | 3,582 | - |
| 4.125% notes | 2,050 | - | 6,089 | - |
| Net income (loss) attributable to Green Plains - diluted | $ 37,284 | $ 7,928 | $ 24,102 | $ (8,019) |
| | | | | |
| Weighted average shares outstanding - basic | 41,348 | 38,282 | 40,008 | 38,301 |
| Effect of dilutive convertible debt: | | | | |
| 3.25% notes | 3,178 | 760 | 4,551 | - |
| 4.125% notes | 6,071 | - | 6,071 | - |
| Effect of dilutive stock-based compensation awards | 50 | 94 | 63 | - |
| Weighted average shares outstanding - diluted | 50,647 | 39,136 | 50,693 | 38,301 |
| | | | | |
| EPS - diluted | $ 0.74 | $ 0.20 | $ 0.48 | $ (0.21) |

For the nine months ended September 30, 2016, 108 thousand shares related to stock-based compensation awards and convertible debt were excluded from the computation of diluted EPS as the inclusion of these shares would have been antidilutive.

## 11. STOCKHOLDERS' EQUITY

Components of stockholders' equity are as follows (in thousands):

| | Common Stock | | Additional Paid-in Capital | Retained Earnings | Accum. Other Comp. Loss | Treasury Stock | | Total Green Plains Stockholders' Equity | Non-Controlling Interests | Total Stockholders' Equity |
|---|---|---|---|---|---|---|---|---|---|---|
| | Shares | Amount | | | | Shares | Amount | | | |
| Balance, December 31, 2016 | 46,079 | $ 46 | $ 659,200 | $ 283,214 | $ (4,137) | 7,715 | $ (75,816) | $ 862,507 | $ 116,684 | $ 979,191 |
| Net income | - | - | - | 14,431 | - | - | - | 14,431 | 14,853 | 29,284 |
| Cash dividends and distributions declared | - | - | - | (14,053) | - | - | - | (14,053) | (15,214) | (29,267) |
| Other comprehensive loss before reclassification | - | - | - | - | (9,436) | - | - | (9,436) | - | (9,436) |
| Amounts reclassified from accumulated other comprehensive loss | - | - | - | - | (34) | - | - | (34) | - | (34) |
| Other comprehensive loss, net of tax | - | - | - | - | (9,470) | - | - | (9,470) | - | (9,470) |
| Repurchase of common stock | - | - | - | - | - | 336 | (5,733) | (5,733) | - | (5,733) |
| Exchange of 3.25% convertible notes due 2018 | - | - | 18,326 | - | - | (2,784) | 27,356 | 45,682 | - | 45,682 |
| Stock-based compensation | 346 | - | 4,497 | - | - | - | - | 4,497 | 159 | 4,656 |
| Stock options exercised | 5 | - | 50 | - | - | - | - | 50 | - | 50 |
| Balance, September 30, 2017 | 46,430 | $ 46 | $ 682,073 | $ 283,592 | $ (13,607) | 5,267 | $ (54,193) | $ 897,911 | $ 116,482 | $ 1,014,393 |

Amounts reclassified from accumulated other comprehensive income (loss) are as follows (in thousands):

| | Three Months Ended September 30, | | Nine Months Ended September 30, | | Statements of Operations Classification |
|---|---|---|---|---|---|
| | 2017 | 2016 | 2017 | 2016 | |
| Gains on cash flow hedges: | | | | | |
| Commodity derivatives | $ (5,242) | $ 25,254 | $ 1,734 | $ 12,029 | Revenues |
| Commodity derivatives | (1,861) | (28,548) | (1,679) | (15,904) | Cost of goods sold |
| Total | (7,103) | (3,294) | 55 | (3,875) | Income (loss) before income taxes |
| Income tax expense (benefit) | (2,650) | (1,144) | 21 | (1,369) | Income tax expense (benefit) |
| Amounts reclassified from accumulated other comprehensive income (loss) | $ (4,453) | $ (2,150) | $ 34 | $ (2,506) | |

## 12. INCOME TAXES

The company records actual income tax expense or benefit during interim periods rather than on an annual effective tax rate method. Certain items are given discrete period treatment and the tax effect of those items are reported in full in the relevant interim period. Green Plains Partners is a limited partnership, which is treated as a flow-through entity for federal income tax purposes and is not subject to federal income taxes. As a result, the consolidated financial statements do not reflect such income taxes on pre-tax income or loss attributable to the noncontrolling interest in the partnership.

The 2017 effective tax rate can be affected by variances among the estimates and amounts of taxable income among the various states, entities and activity types, realization of tax credits, adjustments from resolution of tax matters under review, valuation allowances and the company's assessment of its liability for uncertain tax positions.

Income tax benefit was $48.8 million and $60.9 million for the three and nine months ended September 30, 2017, respectively, compared with income tax expense of $5.1 million and income tax benefit of $4.3 million for the three and nine months ended September 30, 2016, respectively. The variation in tax expense was due primarily to the company's recognition of tax benefits related to R&D Credits.

A study was conducted to determine whether certain activities the company performs qualify for the R&D credit allowed

by the Internal Revenue Code Section 41. As a result of this study, the company concluded these activities do qualify for the credit and determined it was appropriate to claim the benefit of these credits for all open tax years.

During the quarter ended September 30, 2017, the company recognized a net tax benefit of $49.5 million for federal and state R&D Credits relating to tax years 2013 to 2016 as well as an estimated year-to-date tax benefit for federal and state R&D Credits for the 2017 tax year. Of this amount, $9.0 million ($5.9 million net) in refundable credits not dependent upon taxable income was recorded as a reduction of cost of goods sold and $43.6 million was recorded as an income tax benefit.

The amount of unrecognized tax benefits for uncertain tax positions was $27.3 million as of September 30, 2017, and $0.2 million as of December 31, 2016. Recognition of these benefits would have a favorable impact on the company's effective tax rate.

## 13. COMMITMENTS AND CONTINGENCIES

*Operating Leases*

The company leases certain facilities, equipment and parcels of land under agreements that expire at various dates. For accounting purposes, rent expense is based on a straight-line amortization of the total payments required over the lease. The company incurred lease expenses of $11.2 million and $33.4 million during the three and nine months ended September 30, 2017, respectively, and $9.1 million and $27.2 million during the three and nine months ended September 30, 2016, respectively.

Aggregate minimum lease payments under these agreements for the remainder of 2017 and in future years are as follows (in thousands):

| Year Ending December 31, | Amount |
|---|---|
| 2017 | $ 10,168 |
| 2018 | 28,976 |
| 2019 | 19,544 |
| 2020 | 13,160 |
| 2021 | 6,444 |
| Thereafter | 22,105 |
| Total | $ 100,397 |

*Commodities*

As of September 30, 2017, the company had contracted future purchases of grain, corn oil, natural gas, crude oil, ethanol, distillers grains and cattle, valued at approximately $454.4 million.

*Legal*

In November 2013, the company acquired two ethanol plants located in Fairmont, Minnesota and Wood River, Nebraska. There is ongoing litigation related to the consideration for this acquisition. On August 19, 2016, the Delaware Superior Court granted Green Plains' motion for summary judgment in part and held that the seller's attempt to disclaim liability for certain shortfall amounts through the use of a disclaimer provision was ineffective. Based on the court order, the company determined that previously accrued contingent liabilities of approximately $6.3 million no longer represented probable losses. These accruals were reversed as a reduction of cost of goods sold during the year ended December 31, 2016, because the adjustment relates to a reduction in the cost of inventory purchased in the acquisitions. The court has directed the company and the seller to work together to determine the precise shortfall amount due to Green Plains. The company believes the remaining amount due to Green Plains is approximately $5.5 million; however, the seller has the right to dispute the details of the calculation and appeal the underlying Superior Court order. Accordingly, the total amount Green Plains may receive is yet to be determined. The remaining amount due to the company represents a gain contingency which will not be recorded until all contingencies are resolved.

In addition to the above-described proceeding, the company is currently involved in litigation that has arisen in the ordinary course of business, but does not believe any pending litigation will have a material adverse effect on its financial position, results of operations or cash flows.

## 14. RELATED PARTY TRANSACTIONS

*Commercial Contracts*

Three subsidiaries of the company have executed separate financing agreements for equipment with Amur Equipment Finance. Gordon Glade, a member of the company's board of directors, is a shareholder of Amur Equipment Finance. Balances of approximately $638 thousand and $808 thousand related to these financing arrangements were included in debt at September 30, 2017, and December 31, 2016, respectively. Payments, including principal and interest, totaled $69 thousand and $207 thousand during each of the three and nine months ended September 30, 2017 and 2016, respectively. The weighted average interest rate for the financing agreements with Amur Equipment Finance was 6.8%.

*Aircraft Leases*

Effective August 1, 2017, the company entered into two agreements with an entity controlled by Wayne Hoovestol for the lease of two aircrafts, replacing the prior agreements. Mr. Hoovestol is chairman of the company's board of directors. The company agreed to pay $11,589 per month for the combined use of up to 125 hours per year of the aircrafts. Flight time in excess of 125 hours per year will incur additional hourly charges. Payments related to these leases totaled $39 thousand and $141 thousand during the three and nine months ended September 30, 2017, respectively, and $49 thousand and $137 thousand during the three and nine months ended September 30, 2016, respectively. The company had $2 thousand in outstanding payables related to these agreements at September 30, 2017, and no outstanding payables related to these agreements at December 31, 2016.

## 15. SUBSEQUENT EVENTS

On October 27, 2017, the partnership upsized its revolving credit facility by $40 million, from $155 million to $195 million, by accessing a portion of the $100 million incremental commitment in place on the facility.

## Item 2. Management's Discussion and Analysis of Financial Condition and Results of Operations.

***General***

The following discussion and analysis provides information we believe is relevant to understand our consolidated financial condition and results of operations. This discussion should be read in conjunction with the consolidated financial statements and notes to the consolidated financial statements contained in this report together with our annual report on Form 10-K for the year ended December 31, 2016.

***Cautionary Information Regarding Forward-Looking Statements***

Forward-looking statements are made in accordance with safe harbor provisions of the Private Securities Litigation Reform Act of 1995. These statements are based on current expectations that involve a number of risks and uncertainties and do not relate strictly to historical or current facts, but rather to plans and objectives for future operations. These statements may be identified by words such as "anticipate," "believe," "continue," "estimate," "expect," "intend," "outlook," "plan," "predict," "may," "could," "should," "will" and similar expressions, as well as statements regarding future operating or financial performance or guidance, business strategy, environment, key trends and benefits of actual or planned acquisitions.

Factors that could cause actual results to differ from those expressed or implied in the forward-looking statements include, but are not limited to, those discussed in Part I, Item 1A – Risk Factors of our annual report on Form 10-K for the year ended December 31, 2016, or incorporated by reference. Specifically, we may experience significant fluctuations in future operating results due to a number of economic conditions, including: competition in the ethanol industry and other industries in which we operate; commodity market risks including those that may result from weather conditions; financial market risks; counterparty risks; risks associated with changes to government policy or regulation, risks related to acquisitions and achieving anticipated results; risks associated with merchant trading, cattle feeding operations, vinegar production and other risk factors detailed in reports filed with the SEC. Additional risks related to Green Plains Partners LP include compliance with commercial contractual obligations, potential tax consequences related to our investment in the partnership and risks disclosed in the partnership's SEC filings associated with the operation of the partnership as a separate, publicly traded entity.

We believe our expectations regarding future events are based on reasonable assumptions; however, these assumptions may not be accurate or account for all risks and uncertainties. Consequently, forward-looking statements are not guaranteed. Actual results may vary materially from those expressed or implied in our forward-looking statements. In addition, we are not obligated, nor do we intend to update our forward-looking statements as a result of new information unless it is required by applicable securities laws. We caution investors not to place undue reliance on forward-looking statements, which represent management's views as of the date of this report or documents incorporated by reference.

***Overview***

Green Plains is a diversified commodity-processing business with operations related to ethanol production, grain handling and storage, cattle feedlots, food ingredients, and commodity marketing and logistics services. We are focused on generating stable operating margins through our diversified business segments and risk management strategy. Green Plains Partners LP is our primary downstream logistics provider, storing and delivering the ethanol we produce. We own a 62.5% limited partner interest, a 2.0% general partner interest and all of the partnership's incentive distribution rights. The public owns the remaining 35.5% limited partner interest. The partnership is consolidated in our financial statements.

*Recent Developments*

On July 28, 2017, we amended our Green Plains Trade senior secured asset-based revolving credit facility, to increase the maximum commitment from $150.0 million to $300.0 million and extend the maturity date to July 28, 2022. The amended credit facility increases advance rates and modifies the eligible inventory definitions to include additional commodities and locations. Advances are subject to variable interest rates equal to a daily LIBOR rate plus 2.25% or the base rate plus 1.25%. The unused portion of the credit facility is also subject to a commitment fee of 0.375% per annum.

On August 29, 2017, the company entered into a $500.0 million term loan agreement which matures on August 29, 2023, to refinance approximately $405.0 million of total debt outstanding issued by Green Plains Processing and Fleischmann's Vinegar Company, pay associated fees and expenses and for general corporate purposes. The term loan is guaranteed by the company and substantially all of its subsidiaries, but not Green Plains Partners and certain other entities, and secured by substantially all of the assets of the company, including 17 ethanol production facilities, vinegar production facilities and a

second priority lien on the assets secured under the revolving credit facilities at Green Plains Trade, Green Plains Cattle and Green Plains Grain.

In November of 2017, we anticipate completion of the Phase I development of intermodal export and import fuels terminal at Jefferson Gulf Coast Energy Partner's existing Beaumont, Texas terminal. We anticipate offering our interest in the joint venture to the partnership once all phases of commercial development are completed.

***Results of Operations***

During the third quarter of 2017, we resumed utilization rates aligned with historic levels following idled capacity at several plants in response to the weak margin environment during the previous quarter. We operated our ethanol production facilities at approximately 83.7% of capacity, resulting in ethanol production of 313.6 mmg for the third quarter of 2017, compared with 292.2 mmg, or 92.5% of capacity, for the same quarter last year. Ethanol production capacity was increased with our acquisitions of the Madison, Illinois, Mount Vernon, Indiana, and York, Nebraska plants, acquired on September 23, 2016.

*Industry Trends and Factors Affecting our Results of Operations*

Seasonal summer driving demand was met by increased ethanol production during the third quarter of 2017. According to the EIA, average daily domestic ethanol production was 1.03 million barrels per day during the third quarter of 2017, up slightly from 1.00 million barrels per day during the second quarter of 2017. Average daily production increased 4% year-to-date compared with the same period last year due to incremental expansion by existing facilities to optimize production. Weekly refiner and blender input volume, which is linked to consumer demand, also increased 1% year-to-date compared with the same period last year, helped by the growing number of retail gasoline stations offering higher ethanol blends to consumers. According to Growth Energy, 1,043 retail stations were selling E15 at October 5, 2017, up from 431 stations at December 31, 2016. Average daily gasoline demand was flat during the third quarter of 2017, slowing by 1.5% for the nine months ended September 30, 2017, compared with the same periods in 2016. Ethanol futures traded at an average discount of $0.11 to RBOB during the third quarter. At September 30, 2017, domestic ethanol inventory of 21.5 million barrels was 1.4 million barrels higher than the ending stocks at the same time last year. Increased export volumes have partially offset the difference between increased production and blending volumes year over year.

We currently estimate that net ethanol exports will reach between 1.1 billion gallons and 1.3 billion gallons in 2017. Year-to-date domestic ethanol exports through August 30, 2017, were 906.5 mmg, up 53% from the comparable period in 2016. Brazil accounted for 37% of the domestic ethanol export volumes, while Canada, India, the Philippines and United Arab Emirates accounted for 24%, 11%, 5% and 4%, respectively. On September 13, 2017, China's National Development and Reform Commission, the National Energy Board and 15 other state departments issued a joint plan to expand the use and production of biofuels containing up to 10% ethanol by 2020. China, the number three importer of U.S. ethanol in 2016, has imported negligible volumes year-to-date due to a 30% tariff imposed on U.S. and Brazil fuel ethanol, which took effect on January 1, 2017, and there is no assurance the recently issued joint plan will lead to increased imports of U.S. ethanol. On September 1, 2017, Brazil's Chamber of Foreign Trade, or CAMEX, issued an official written resolution, imposing a 20% tariff on U.S. ethanol imports in excess of 150 million liters, or 39.6 million gallons per quarter. The ruling is valid for two years. In Mexico, four lawsuits challenging the June 2017 decision by the Energy Regulatory Commission of Mexico (CRE) to approve the use of 10% ethanol blends were dismissed. A fifth lawsuit was allowed to proceed for judicial review, despite precedent set by the Mexico Supreme Court for dismissal. The CRE is expected to defend its position before the judge makes a final decision. Should the judge rule in favor of the plaintiff, the case will go to the Supreme Court. U.S. ethanol exports to Mexico totaled 29 mmg in 2016.

On July 5, 2017, the EPA proposed maintaining the RVOs for conventional ethanol at 15.0 billion gallons while lowering the volume obligations for advanced alternatives, reducing the overall biofuel target to 19.24 billion gallons for 2018. On September 26, 2017, the EPA issued a Notice of Data Availability for comment, proposing to further reduce the 2018 advanced biofuel volume requirement by 315 mmg, to 3.77 billion gallons, and the total renewable fuel requirement to 18.77 billion gallons, leaving conventional ethanol at 15.0 billion gallons. According to RFS II, if mandatory renewable fuel volumes are reduced by at least 20% for two consecutive years, the EPA is required to modify, or reset, statutory volumes through 2022. Since 2018 is the first year the total proposed RVOs are more than 20% below statutory levels, the EPA Administrator directed his staff to initiate the required technical analysis to perform any future reset consistent with the reset rules. If 2019 RVOs are also more than 20% below statutory levels, the RVO reset will be triggered under RFS II and the EPA will be required to modify statutory volumes through 2022 within one year of the trigger event, based on the same factors used to set the RVOs post-2022.

The U.S. Federal District Court for the D.C. Circuit ruled on July 28, 2017, in favor of the Americans for Clean Energy and its petitioners against the EPA related to its decision to lower the 2016 volume requirements. The Court concluded the EPA erred in how it interpreted the "inadequate domestic supply" waiver provision of RFS II, which authorizes the EPA to consider supply-side factors affecting the volume of renewable fuel available to refiners, blenders, and importers to meet the statutory volume requirements. The waiver provision does not allow the EPA to consider the volume of renewable fuel available to consumers or the demand-side constraints that affect the consumption of renewable fuel by consumers. As a result, the Court vacated the EPA's decision to reduce the total renewable fuel volume requirements for 2016 through its waiver authority, which the EPA is expected to address. We believe this decision will benefit the industry overall, with the EPA's waiver analysis now limited to supply considerations only, and expect the primary impact will be on the RINs market.

Year-to-date U.S. distillers grains exports through August 30, 2017, were 7.3 million metric tons, approximately 4% lower than year-to-date distillers grains exports for the same period last year. Mexico, Turkey, South Korea, Canada, Thailand and Indonesia accounted for 62% of total U.S. distillers export volumes, according to the EIA. On September 1, 2017, the Minister of Agriculture and Rural Development of Vietnam lifted the suspension which blocked imports of U.S. dried distillers grains since January 2017.

On October 19, 2017, the EPA Administrator reiterated his commitment to the text and spirit of the RFS II. In a letter to seven Senators from the Midwestern states, he stated the EPA will meet the November 30, 2017, deadline for issuing RVOs and the EPA's preliminary analysis suggests that final RVOs should be set at amounts at or greater than those provided on July 5, 2017. Moreover, the EPA is actively exploring its authority to issue an RVP waiver and will be pursuing action on RINs involving ethanol exports.

On October 25, 2017, the Master Limited Partnership Parity Act was introduced in the Senate and House of Representatives (H.R. 4118), proposing to expand the definition of qualified sources of income to include clean energy resources, such as ethanol production, and infrastructure projects by publicly traded partnerships. Currently, qualifying income includes the transportation and storage of ethanol and certain specific alternative fuels.

World demand for U.S. beef has risen as diets continue to improve worldwide to include increased animal protein. In June of 2017, the U.S. resumed exporting beef to China, following a 13-year ban the Trump Administration lifted as part of a new bilateral agreement between the countries.

***Comparability of our Financial Results***

As a result of acquisitions during 2016, we implemented segment organizational changes during the fourth quarter of 2016, whereby we now report the financial and operating performance in the following four operating segments: (1) ethanol production, which includes the production of ethanol, distillers grains and corn oil, (2) agribusiness and energy services, which includes grain handling and storage and marketing and merchant trading for company-produced and third-party ethanol, distillers grains, corn oil, natural gas and other commodities, (3) food and ingredients, which includes cattle feedlots, vinegar production and food-grade corn oil operations and (4) partnership, which includes fuel storage and transportation services. Prior periods have been reclassified to conform to the revised segment presentation.

We have re-evaluated the profitability measure of our reportable segments' operating performance and have determined that segment EBITDA (earnings before interest, taxes, depreciation and amortization) is primarily used by our management to evaluate segment operating activities, and therefore is a more meaningful profitability measure than the previously reported segment operating income. In addition, EBITDA is a financial measure that is widely used by analysts and investors in our industries. As a result, we are now including segment EBITDA as a performance measure.

Effective April 1, 2016, we increased our ownership of BioProcess Algae, a joint venture formed in 2008, to 82.8% and currently own approximately 90.0%. Beginning April 1, 2016, we consolidate the financial results of BioProcess Algae, and record a noncontrolling interest for the economic interest in the joint venture held by others.

On September 23, 2016, we acquired three ethanol production facilities located in Madison, Illinois, Mount Vernon, Indiana, and York, Nebraska, with combined annual production capacity of approximately 230 mmgy.

On October 3, 2016, we acquired Fleischmann's Vinegar, one of the world's largest producers of food-grade industrial vinegar which includes seven production facilities and four distribution warehouses.

On March 16, 2017, we acquired the assets of a cattle-feeding operation located in Hereford, Texas, which added a feedlot capacity of 30,000 head of cattle to our operations.

On May 16, 2017, we acquired the assets of two cattle-feeding operations located in Leoti, Kansas and Yuma, Colorado, which added a combined feedlot capacity of 155,000 head of cattle to our operations.

During the quarter ended September 30, 2017, the company recognized a net tax benefit of $49.5 million for federal and state R&D Credits relating to tax years 2013 to 2016 as well as an estimated year-to-date tax benefit for federal and state R&D Credits for the 2017 tax year. Of this amount, $9.0 million ($5.9 million net) in refundable credits not dependent upon taxable income was recorded as a reduction of cost of goods sold and $43.6 million was recorded as an income tax benefit.

Corporate activities include selling, general and administrative expenses, consisting primarily of compensation, professional fees and overhead costs not directly related to a specific operating segment.

During the normal course of business, our operating segments do business with each other. For example, our agribusiness and energy services segment procures grain and natural gas and sells products, including ethanol, distillers grains and corn oil of our ethanol production segment. Our partnership segment provides fuel storage and transportation services for our agribusiness and energy services segment. These intersegment activities are treated like third-party transactions with origination, marketing and storage fees charged at estimated market values. Consequently, these transactions affect segment performance; however, they do not impact our consolidated results since the revenues and corresponding costs are eliminated.

We, together with our subsidiaries, own a 62.5% limited partner interest and a 2.0% general partner interest in the partnership and own all of the partnership's incentive distribution rights, with the remaining 35.5% limited partner interest owned by public common unitholders. We consolidate the financial results of the partnership, and record a noncontrolling interest for the economic interest in the partnership held by the public common unitholders.

*Segment Results*

The selected operating segment financial information are as follows (in thousands):

| | Three Months Ended September 30, | | % | Nine Months Ended September 30, | | % |
|---|---|---|---|---|---|---|
| | **2017** | **2016** | **Variance** | **2017** | **2016** | **Variance** |
| Revenues: | | | | | | |
| Ethanol production: | | | | | | |
| Revenues from external customers | $ 620,180 | $ 586,988 | 5.7% | $ 1,857,356 | $ 1,710,484 | 8.6% |
| Intersegment revenues | 3,579 | - | * | 6,624 | - | * |
| Total segment revenues | 623,759 | 586,988 | 6.3 | 1,863,980 | 1,710,484 | 9.0 |
| Agribusiness and energy services: | | | | | | |
| Revenues from external customers | 164,604 | 168,143 | (2.1) | 483,670 | 531,445 | (9.0) |
| Intersegment revenues | 14,406 | 8,936 | 61.2 | 33,679 | 24,934 | 35.1 |
| Total segment revenues | 179,010 | 177,079 | 1.1 | 517,349 | 556,379 | (7.0) |
| Food and ingredients: | | | | | | |
| Revenues from external customers | 114,750 | 84,655 | 35.6 | 329,432 | 230,812 | 42.7 |
| Intersegment revenues | 38 | 37 | 2.7 | 113 | 112 | 0.9 |
| Total segment revenues | 114,788 | 84,692 | 35.5 | 329,545 | 230,924 | 42.7 |
| Partnership: | | | | | | |
| Revenues from external customers | 1,701 | 2,066 | (17.7) | 4,724 | 6,042 | (21.8) |
| Intersegment revenues | 24,748 | 24,139 | 2.5 | 74,019 | 69,445 | 6.6 |
| Total segment revenues | 26,449 | 26,205 | 0.9 | 78,743 | 75,487 | 4.3 |
| Revenues including intersegment activity | 944,006 | 874,964 | 7.9 | 2,789,617 | 2,573,274 | 8.4 |
| Intersegment eliminations | (42,771) | (33,112) | 29.2 | (114,435) | (94,491) | 21.1 |
| Revenues as reported | $ 901,235 | $ 841,852 | 7.1% | $ 2,675,182 | $ 2,478,783 | 7.9% |

| | Three Months Ended September 30, | | % | Nine Months Ended September 30, | | % |
|---|---|---|---|---|---|---|
| | 2017 | 2016 | Variance | 2017 | 2016 | Variance |
| Cost of goods sold: | | | | | | |
| Ethanol production | $ 590,904 | $ 549,705 | 7.5% | $ 1,802,688 | $ 1,649,641 | 9.3% |
| Agribusiness and energy services | 168,735 | 163,643 | 3.1 | 487,239 | 518,135 | (6.0) |
| Food and ingredients | 98,854 | 78,792 | 25.5 | 281,898 | 219,087 | 28.7 |
| Partnership | - | - | * | - | - | * |
| Intersegment eliminations | (42,706) | (33,257) | 28.4 | (114,123) | (93,769) | 21.7 |
| | $ 815,787 | $ 758,883 | 7.5% | $ 2,457,702 | $ 2,293,094 | 7.2% |

| | Three Months Ended September 30, | | % | Nine Months Ended September 30, | | % |
|---|---|---|---|---|---|---|
| | 2017 | 2016 | Variance | 2017 | 2016 | Variance |
| Operating income (loss): | | | | | | |
| Ethanol production | $ 3,107 | $ 14,334 | (78.3%) | $ (25,950) | $ (7,673) | (238.2%) |
| Agribusiness and energy services | 3,686 | 7,241 | (49.1) | 13,138 | 20,744 | (36.7) |
| Food and ingredients | 10,132 | 5,199 | 94.9 | 30,472 | 9,594 | 217.6 |
| Partnership | 16,290 | 15,084 | 8.0 | 47,707 | 42,958 | 11.1 |
| Intersegment eliminations | 8 | 181 | (95.6) | (147) | (612) | (76.0) |
| Corporate activities | (12,507) | (11,184) | 11.8 | (30,898) | (29,393) | 5.1 |
| | $ 20,716 | $ 30,855 | (32.9%) | $ 34,322 | $ 35,618 | (3.6%) |

| | Three Months Ended September 30, | | % | Nine Months Ended September 30, | | % |
|---|---|---|---|---|---|---|
| | 2017 | 2016 | Variance | 2017 | 2016 | Variance |
| EBITDA: | | | | | | |
| Ethanol production | $ 25,570 | $ 30,155 | (15.2%) | $ 38,521 | $ 39,164 | (1.6%) |
| Agribusiness and energy services | 5,150 | 6,310 | (18.4) | 15,910 | 21,246 | (25.1) |
| Food and ingredients | 13,272 | 5,465 | 142.9 | 39,741 | 10,430 | 281.0 |
| Partnership | 17,589 | 16,620 | 5.8 | 51,549 | 47,241 | 9.1 |
| Intersegment eliminations | 8 | (39) | 120.5 | (147) | (1,174) | 87.5 |
| Corporate activities | (11,212) | (9,439) | 18.8 | (27,275) | (25,944) | 5.1 |
| | $ 50,377 | $ 49,072 | 2.7% | $ 118,299 | $ 90,963 | 30.1% |

* Percentage variance not considered meaningful.

We use EBITDA as a segment measure of profitability to compare the financial performance of our reportable segments and manage those segments. We believe EBITDA is a useful measure to compare our performance against other companies. EBITDA should not be considered an alternative to, or more meaningful than, net income, which is prepared in accordance with GAAP. EBITDA calculations may vary from company to company. Accordingly, our computation of EBITDA may not be comparable with a similarly titled measure of other companies.

The following table reconciles net income to EBITDA for the periods indicated (in thousands):

| | Three Months Ended September 30, | | Nine Months Ended September 30, | |
|---|---|---|---|---|
| | 2017 | 2016 | 2017 | 2016 |
| Net income | $ 39,429 | $ 12,884 | $ 29,284 | $ 6,053 |
| Interest expense | 31,889 | 11,819 | 69,815 | 33,117 |
| Income tax expense (benefit) | (48,775) | 5,083 | (60,905) | (4,339) |
| Depreciation and amortization | 27,834 | 19,286 | 80,105 | 56,132 |
| EBITDA | $ 50,377 | $ 49,072 | $ 118,299 | $ 90,963 |

Three Months Ended September 30, 2017, compared with the Three Months Ended September 30, 2016

*Consolidated Results*

Consolidated revenues increased $59.4 million for the three months ended September 30, 2017, compared with the same period in 2016. Revenues were impacted by an increase in ethanol volumes sold, plus the additions of Fleischmann’s Vinegar during the fourth quarter of 2016 and the cattle feedlots during the first and second quarters of 2017.

Operating income decreased $10.1 million for the three months ended September 30, 2017, compared with the same period last year primarily due to decreased margins on ethanol production, partially offset by the Fleischmann’s Vinegar and the cattle feedlot acquisitions. EBITDA increased $1.3 million for the three months ended September 30, 2017, compared with the same period last year primarily due to the Fleischmann’s Vinegar acquisition and additional cattle margins, partially offset by decreased margins in ethanol production. Interest expense increased $20.1 million for the three months ended September 30, 2017, compared with the same period in 2016, primarily due to $12.3 million in expense associated with the termination of previous credit facilities and higher average debt outstanding and borrowing costs. Income tax benefit was $48.8 million for the three months ended September 30, 2017, compared with income tax expense of $5.1 million for the same period in 2016 due to the company’s recognition of tax benefits related to R&D Credits.

The following discussion provides greater detail about our third quarter segment performance.

*Ethanol Production Segment*

Key operating data for our ethanol production segment is as follows:

| | Three Months Ended September 30, | | |
|---|---|---|---|
| | **2017** | **2016** | **% Variance** |
| Ethanol produced (thousands of gallons) | 313,642 | 292,238 | 7.3% |
| Distillers grains produced (thousands of equivalent dried tons) | 817 | 790 | 3.4 |
| Corn oil produced (thousands of pounds) | 75,440 | 72,176 | 4.5 |
| Corn consumed (thousands of bushels) | 109,544 | 102,113 | 7.3 |

Revenues in our ethanol production segment increased $36.8 million for the three months ended September 30, 2017, compared with the same period in 2016 primarily due to increased ethanol volumes sold. Ethanol production capacity increased due to the acquisition of the Madison, Mount Vernon and York ethanol plants.

Cost of goods sold for the ethanol production segment increased $41.2 million for the three months ended September 30, 2017, compared with the same period last year due to decreased margins in ethanol production. As a result of decreased margins, EBITDA decreased $4.6 million for the three months ended September 30, 2017, compared with the same period in 2016. Depreciation and amortization expense for the segment was $21.0 million for the three months ended September 30, 2017, compared with $15.7 million for the same period last year.

*Agribusiness and Energy Services Segment*

Revenues in our agribusiness and energy services segment increased $1.9 million while EBITDA decreased by $1.2 million for the three months ended September 30, 2017, compared with the same period in 2016. The increase in revenues was primarily due to higher average realized prices for distillers grains and increased intersegment distillers grain and corn revenues, while EBITDA decreased primarily as a result of decreased margins on trading activity. Depreciation expense increased by $0.8 million for the three months ended September 30, 2017, primarily as a result of accelerated depreciation related to the disposition of fixed assets at our St. Edward, Nebraska location.

*Food and Ingredients Segment*

Revenues in our food and ingredients segment increased $30.1 million for the three months ended September 30, 2017, compared with the same period in 2016. The increase in revenues was primarily due to the acquisitions of Fleischmann’s

Vinegar and the cattle feedlots. The daily average company-owned cattle on feed for the three months ended September 30, 2017 and 2016, was approximately 148,000 and 68,000 head, respectively, and the daily average third-party owned cattle on feed for the three months ended September 30, 2017 and 2016, was approximately 70,000 and 1,100, respectively.

EBITDA increased by $7.8 million for the three months ended September 30, 2017, compared with the same period in 2016 primarily due to the acquisition of Fleischmann's Vinegar, as well as increased cattle margins.

*Partnership Segment*

Revenues generated by our partnership segment increased $0.2 million for the three months ended September 30, 2017 compared to the same period of 2016. Revenues generated from the partnership's storage and throughput agreement with Green Plains Trade increased $0.8 million primarily due to higher throughput volumes related to ethanol storage assets acquired in September 2016. Other revenue increased $0.3 million due to expansion of our truck fleet. These increases were partially offset by revenues generated from the partnership's rail transportation services agreement with Green Plains Trade, which decreased $0.5 million due to lower average rates charged for railcar volumetric capacity provided, and revenues generated from the partnership's terminal services agreements, which decreased $0.4 million due to lower throughput volumes at the Birmingham facility and other terminals. EBITDA increased $1.0 million for the three months ended September 30, 2017, compared with the same period in 2016 due to the increased storage and throughput revenues.

*Intersegment Eliminations*

Intersegment eliminations of revenues increased by $9.7 million for the three months ended September 30, 2017, compared with the same period in 2016 due primarily to increased intersegment distillers grain revenues paid to the ethanol production segment and increased intersegment corn revenues paid to the agribusiness and energy services segment.

*Corporate Activities*

EBITDA decreased by $1.8 million for the three months ended September 30, 2017, compared with the same period in 2016 due to increases in selling, general and administrative expenses primarily driven by salaries, insurance, rent, utilities and property taxes as a result of the Fleischmann's Vinegar and cattle feedlot acquisitions.

*Income Taxes*

The income tax benefit for the three months ended September 30, 2017 was $48.8 million compared to income tax expense of $5.1 million for the three months ended September 30, 2016. The change in income taxes for the three months ended September 30, 2017 was primarily due to the company's recognition of tax benefits related to R&D Credits.

A study was conducted to determine whether certain activities the company performs qualify for the R&D credit allowed by the Internal Revenue Code Section 41. As a result of this study, the company concluded these activities do qualify for the credit and determined it was appropriate to claim the benefit of these credits for all open tax years. The company recognized these credits during the third quarter of 2017, along with an estimate of the credit for qualified activities year-to-date. The company will continue to evaluate eligibility for R&D credits on a regular basis.

<u>Nine Months Ended September 30, 2017, compared with the Nine Months Ended September 30, 2016</u>

*Consolidated Results*

Consolidated revenues increased $196.4 million for the nine months ended September 30, 2017, compared with the same period in 2016. Revenues were impacted by an increase in ethanol, corn oil, and cattle volumes sold. In addition, we acquired Fleischmann's Vinegar during the fourth quarter of 2016 and cattle feedlots during the first and second quarters of 2017. This was partially offset by a decrease in grain trading activity volumes and lower average realized prices for grain, distillers grains and cattle.

Operating income decreased $1.3 million for the nine months ended September 30, 2017, compared with the same period last year primarily due to a decrease in ethanol margins as well as a decrease in grain trading activity, partially offset by the acquisitions of Fleischmann's Vinegar and the cattle feedlots. EBITDA increased $27.3 million for the nine months ended September 30, 2017, compared with the same period last year primarily due to the acquisitions of Fleischmann's Vinegar and the cattle feedlots, partially offset by decreased ethanol margins as well as decreased grain trading activity. Interest expense increased $36.7 million for the nine months ended September 30, 2017, compared with the same period in 2016, primarily due to higher average debt outstanding and borrowing costs, $12.3 million in expense associated with the termination of

previous credit facilities, and a $1.3 million charge related to the extinguishment of a portion of the 3.25% convertible notes. Income tax benefit was $60.9 million for the nine months ended September 30, 2017, compared with $4.3 million for the same period in 2016 primarily due to the company's recognition of tax benefits related to the R&D Credits.

The following discussion provides greater detail about our segment performance for the first nine months of 2017.

*Ethanol Production Segment*

Key operating data for our ethanol production segment is as follows:

| | Nine Months Ended September 30, | | |
|---|---|---|---|
| | 2017 | 2016 | % Variance |
| Ethanol produced (thousands of gallons) | 915,607 | 813,464 | 12.6% |
| Distillers grains produced (thousands of equivalent dried tons) | 2,421 | 2,170 | 11.6 |
| Corn oil produced (thousands of pounds) | 216,482 | 196,530 | 10.2 |
| Corn consumed (thousands of bushels) | 318,709 | 284,282 | 12.1 |

Revenues in our ethanol production segment increased $153.5 million for the nine months ended September 30, 2017, compared with the same period in 2016 primarily due to higher volumes of ethanol, distillers grains and corn oil produced, partially offset by lower average distillers grains prices realized. The increase in volumes produced was primarily due to the acquisition of the Madison, Mount Vernon and York ethanol plants.

Cost of goods sold for the ethanol production segment increased $153.0 million for the nine months ended September 30, 2017, compared with the same period last year due to higher production volumes associated with the acquisition of the Madison, Mount Vernon and York ethanol plants as well as decreased margins on ethanol production. EBITDA decreased $0.6 million for the nine months ended September 30, 2017, compared with the same period in 2016 due to decreased margins in ethanol production. Depreciation and amortization expense for the segment was $61.4 million for the nine months ended September 30, 2017, compared with $46.7 million for the same period last year.

*Agribusiness and Energy Services Segment*

Revenues in our agribusiness and energy services segment decreased $39.0 million and EBITDA decreased by $5.3 million for the nine months ended September 30, 2017, compared with the same period in 2016. The decrease in revenues was primarily due to a decrease in grain trading activity volumes, partially offset by higher average realized prices for distillers grain and increased intersegment distillers grain, marketing and corn revenues. EBITDA decreased primarily as a result of decreased trading activity. Depreciation expense increased by $0.9 million for the nine months ended September 30, 2017, primarily as a result of accelerated depreciation related to the disposition of fixed assets at our St. Edward, Nebraska location.

*Food and Ingredients Segment*

Revenues in our food and ingredients segment increased $98.6 million for the nine months ended September 30, 2017, compared with the same period in 2016. The increase in revenues was primarily due to the acquisitions of Fleischmann's Vinegar and the cattle feedlots. The daily average company-owned cattle on feed for the nine months ended September 30, 2017 and 2016, was approximately 100,000 and 65,000 head, respectively, and the daily average third-party owned cattle on feed for the nine months ended September 30, 2017 and 2016, was approximately 59,000 and 1,400, respectively.

EBITDA increased by $29.3 million for the nine months ended September 30, 2017, compared with the same period in 2016 primarily due to the acquisition of Fleischmann's Vinegar as well as increased cattle margins.

*Partnership Segment*

Revenues generated by our partnership segment increased $3.3 million for the nine months ended September 30, 2017 compared to the same period of 2016, due to higher storage and throughput volumes, partially offset by a decrease in the average rate charged for the railcar volumetric capacity related to the rail transportation services agreement with Green Plains Trade, as well as lower throughput volumes under the terminal services agreements. EBITDA increased $4.3 million for the nine months ended September 30, 2017, compared with the same period in 2016 due to the increased storage and throughput revenues, as well as a decrease in operations and maintenance expenses of $0.6 million during the nine months ended September 30, 2017 compared with the same period of 2016.

*Intersegment Eliminations*

Intersegment eliminations of revenues increased by $19.9 million for the nine months ended September 30, 2017, compared with the same period in 2016 due to increased intersegment distillers grain and corn revenues paid to the ethanol production and agribusiness and energy services segments and the increase in storage and throughput fees paid to the partnership segment.

*Corporate Activities*

EBITDA decreased by $1.3 million for the nine months ended September 30, 2017, compared with the same period in 2016 due to increases in selling, general and administrative expenses primarily driven by salaries, insurance, rent, utilities and property taxes as a result of the Fleischmann's Vinegar and cattle feedlot acquisitions.

*Income Taxes*

The income tax benefit for the nine months ended September 30, 2017 was $60.9 million compared to $4.3 million for the nine months ended September 30, 2016. The change in income taxes for the nine months ended September 30, 2017 was primarily due to the company's recognition of tax benefits related to R&D Credits.

A study was conducted to determine whether certain activities the company performs qualify for the R&D credit allowed by the Internal Revenue Code Section 41. As a result of this study, the company concluded these activities do qualify for the credit and determined it was appropriate to claim the benefit of these credits for all open tax years. The company recognized these credits during the third quarter of 2017, along with an estimate of the credit for qualified activities year-to-date. The company will continue to evaluate eligibility for R&D credits on a regular basis.

***Liquidity and Capital Resources***

Our principal sources of liquidity include cash generated from operating activities and bank credit facilities. We fund our operating expenses and service debt primarily with operating cash flows. Capital resources for maintenance and growth expenditures are funded by a variety of sources, including cash generated from operating activities, borrowings under bank credit facilities, or issuance of senior notes or equity. Our ability to access capital markets for debt under reasonable terms depends on our financial condition, credit ratings and market conditions. We believe that our ability to obtain financing at reasonable rates and history of consistent cash flow from operating activities provide a solid foundation to meet our future liquidity and capital resource requirements.

On September 30, 2017, we had $261.6 million in cash and equivalents, excluding restricted cash, consisting of $201.3 million available to our parent company and the remainder held at our subsidiaries. We also had $297.0 million available under our revolving credit agreements, some of which were subject to restrictions or other lending conditions. Funds at certain subsidiaries are generally required for their ongoing operational needs and restricted from distribution. At September 30, 2017, our subsidiaries had approximately $124.5 million of net assets that were not available to us in the form of dividends, loans or advances due to restrictions contained in their credit facilities. As a result of the August 29, 2017 $500 million term loan agreement and related debt extinguishment at Green Plains Processing and Fleischmann's Vinegar, we no longer consider certain subsidiaries to have restrictions on cash and asset distributions.

Net cash used by operating activities was $122.2 million for the nine months ended September 30, 2017, compared with net cash provided by operating activities of $63.2 million for the same period in 2016. Operating activities compared to the prior year were primarily affected by an increase in inventories and derivative financial instruments and decreases in deferred income taxes and accounts payable and accrued liabilities, partially offset by decreases in accounts receivable and increases in noncurrent assets and liabilities for the nine months ended September 30, 2017. The changes in deferred income taxes and noncurrent asset and liabilities were driven by the R&D credits recognized during the third quarter of 2017. Net cash used by

investing activities was $110.2 million for the nine months ended September 30, 2017, due primarily to acquisitions of the cattle feedlots, as well as capital expenditures at our existing ethanol plants and our vinegar operations. Net cash provided by financing activities was $189.8 million for the nine months ended September 30, 2017, compared with $248.8 million for the same period in 2016. Green Plains Trade, Green Plains Cattle and Green Plains Grain use revolving credit facilities to finance working capital requirements. We frequently draw from and repay these facilities which results in significant cash movements reflected on a gross basis within financing activities as proceeds from and payments on short-term borrowings.

We incurred capital expenditures of $37.7 million in the first nine months of 2017 for various maintenance and expansion projects. Capital spending for the remainder of 2017 is expected to be approximately $11.9 million for various projects, and investments in joint ventures are expected to be approximately $7.4 million, which are expected to be financed with available borrowings under our credit facilities and cash provided by operating activities.

Our business is highly sensitive to the price of commodities, particularly for corn, ethanol, distillers grains, corn oil, natural gas and cattle. We use derivative financial instruments to reduce the market risk associated with fluctuations in commodity prices. Sudden changes in commodity prices may require cash deposits with brokers for margin calls or significant liquidity with little advanced notice to meet margin calls, depending on our open derivative positions. On September 30, 2017, we had $52.5 million in deposits for broker margin requirements. We continuously monitor our exposure to margin calls and believe we will continue to maintain adequate liquidity to cover margin calls from our operating results and borrowings.

We have paid a quarterly cash dividend since August 2013 and anticipate declaring a cash dividend in future quarters on a regular basis. Future declarations of dividends, however, are subject to board approval and may be adjusted as our liquidity, business needs or market conditions change. On August 16, 2017, our board of directors declared a quarterly cash dividend of $0.12 per share. The dividend was paid on September 15, 2017, to shareholders of record at the close of business on August 28, 2017.

For each calendar quarter commencing with the quarter ended September 30, 2015, the partnership agreement requires the partnership to distribute all available cash, as defined, to its partners, including us, within 45 days after the end of each calendar quarter. Available cash generally means all cash and cash equivalents on hand at the end of that quarter less cash reserves established by our general partner plus all or any portion of the cash on hand resulting from working capital borrowings made subsequent to the end of that quarter. On October 19, 2017, the board of directors of the general partner of the partnership declared a cash distribution of $0.46 per unit on outstanding common and subordinated units. The distribution is payable on November 10, 2017, to unitholders of record at the close of business on November 3, 2017.

In August 2014, we announced a share repurchase program of up to $100 million of our common stock. Under the program, we may repurchase shares in open market transactions, privately negotiated transactions, accelerated share buyback programs, tender offers or by other means. The timing and amount of repurchase transactions are determined by our management based on market conditions, share price, legal requirements and other factors. The program may be suspended, modified or discontinued at any time without prior notice. We repurchased 335,849 shares of common stock for approximately $5.7 million under the program during the third quarter of 2017. To date, we have repurchased 850,839 shares of common stock for approximately $15.7 million under the program.

We believe we have sufficient working capital for our existing operations. A sustained period of unprofitable operations, however, may strain our liquidity making it difficult to maintain compliance with our financing arrangements. We may sell additional equity or borrow capital to improve or preserve our liquidity, expand our business or build additional or acquire existing businesses. We cannot provide assurance that we will be able to secure funding necessary for additional working capital or these projects at reasonable terms, if at all.

***Debt***

For additional information related to our debt, see *Note 8 – Debt* included as part of the notes to consolidated financial statements and *Note 11 – Debt* included as part of the notes to consolidated financial statements included in our annual report on Form 10-K for the year ended December 31, 2016.

We were in compliance with our debt covenants at September 30, 2017. Based on our forecasts and the current margin environment, we believe we will maintain compliance at each of our subsidiaries for the next twelve months or have sufficient liquidity available on a consolidated basis to resolve noncompliance. We cannot provide assurance that actual results will approximate our forecasts or that we will inject the necessary capital into a subsidiary to maintain compliance with its respective covenants. In the event a subsidiary is unable to comply with its debt covenants, the subsidiary's lenders

may determine that an event of default has occurred, and following notice, the lenders may terminate the commitment and declare the unpaid balance due and payable.

*Corporate Activities*

On August 29, 2017, the company and substantially all of the company's subsidiaries, but not including Green Plains Partners and certain other entities as guarantors, entered into a $500 million term loan agreement (the "Term Loan Agreement") with BNP Paribas, as administrative agent and collateral agent (the "Term Loan Agent") and certain other financial institutions, which matures on August 29, 2023, and may be prepaid at any time without premium or penalty other than customary breakage costs with respect to Eurodollar-based loans or certain other limited circumstances in which event a 1.0% prepayment premium would be due.

The Term Loan Agreement requires principal payments of $1.25 million on the last day of each quarter, beginning on December 31, 2017, with a final installment payable on August 29, 2023, equal to the unpaid principal and interest balances of the Term Loan Agreement. Beginning at the end of 2018, mandatory prepayments must be made on an annual basis at various percentages of excess cash flow depending on the total first lien leverage ratio as defined in the Term Loan Agreement. The Term Loan Agreement will bear interest at a variable rate per annum at the Company's election, equal to (a) the applicable LIBOR rate, subject to a 1.00% floor, plus 5.50% or (b) a base rate equal to 4.50% plus the greater of (i) the Federal Funds Rate plus 0.50%, (ii) the Prime Rate, or (iii) one month LIBOR plus 1.00%.

The Term Loan Agreement is guaranteed by the Company and the Term Loan Obligors, and secured by substantially all of the assets of the Company and the Term Loan Obligors, including 17 ethanol production facilities with annual capacity of approximately 1.5 billion gallons, as well as the vinegar production facilities. The covenants of the Term Loan Agreement require the Company to maintain a maximum term debt to total term capitalization, each as defined in the Term Loan Agreement, at the end of each fiscal quarter of not more than 55.0% and a minimum interest coverage ratio, as defined, at the end of each fiscal quarter of not less than 1.25 to 1.0.

The Term Loan Agreement provides for customary events of default, which include (subject in certain cases to customary grace and cure periods), among others, the following: nonpayment of principal or interest; breach of covenants or other agreements in the Term Loan Agreement; defaults in failure to pay certain other indebtedness; and certain events of bankruptcy or insolvency. If any event of default occurs, the remaining principal balance and accrued interest on the Term Loan Agreement will become immediately due and payable.

In August 2016, we issued $170.0 million of 4.125% convertible senior notes due in 2022, or 4.125% notes, which are senior, unsecured obligations with interest payable on March 1 and September 1 of each year. Prior to March 1, 2022, the 4.125% notes are not convertible unless certain conditions are satisfied. The initial conversion rate is 35.7143 shares of common stock per $1,000 of principal which is equal to a conversion price of approximately $28.00 per share. The conversion rate is subject to adjustment upon the occurrence of certain events, including when the quarterly cash dividend exceeds $0.12 per share. We may settle the 4.125% notes in cash, common stock or a combination of cash and common stock.

In September 2013, we issued $120.0 million of 3.25% convertible senior notes due in 2018, or 3.25% notes, which are senior, unsecured obligations with interest payable on April 1 and October 1 of each year. Prior to April 1, 2018, the 3.25% notes are not convertible unless certain conditions are satisfied. The conversion rate is subject to adjustment upon the occurrence of certain events, including when the quarterly cash dividend exceeds $0.04 per share. The conversion rate was recently adjusted as of September 30, 2017 to 49.9981 shares of common stock per $1,000 of principal, which is equal to a conversion price of approximately $20.00 per share. We may settle the 3.25% notes in cash, common stock or a combination of cash and common stock.

During the second quarter of 2017, we entered into several privately negotiated agreements with holders, on behalf of certain beneficial owners of our 3.25% notes. Under these agreements, 2,783,725 shares of our common stock and approximately $8.5 million in cash plus accrued but unpaid interest on the 3.25% notes, were exchanged for approximately $56.3 million in aggregate principal amount of the 3.25% notes. Common stock held as treasury shares were exchanged for the 3.25% notes. Following the closings of the agreements, $63.7 million aggregate principal amount of the 3.25% notes remain outstanding.

At issuance, we separately accounted for the liability and equity components of the convertible notes by bifurcating the gross proceeds between the indebtedness, or liability component, and the embedded conversion option, or equity component. This bifurcation was done by estimating an effective interest rate on the date of issuance for similar notes. The embedded

conversion option was recorded in stockholders' equity. Since we did not exercise the embedded conversion option associated with the notes, pursuant to the guidance within ASC Topic 470, *Debt*, we recorded a loss upon extinguishment measured by the difference between the fair value and carrying value of the liability portion of the notes. As a result, we recorded a charge to interest expense in the consolidated financial statements of approximately $1.3 million during the three months ended June 30, 2017. This charge also included $0.6 million of unamortized debt issuance costs related to the principal balance extinguished. The remaining settlement consideration transferred was allocated to the reacquisition of the embedded conversion option and recognized as a reduction of additional paid-in capital.

*Ethanol Production Segment*

We have small equipment financing loans, capital leases on equipment or facilities, and other forms of debt financing.

*Agribusiness and Energy Services Segment*

Green Plains Grain has a $125.0 million senior secured asset-based revolving credit facility to finance working capital up to the maximum commitment based on eligible collateral. The facility matures in July of 2019. This facility can be increased by up to $75.0 million with agent approval and up to $50.0 million for seasonal borrowings. Total commitments outstanding under the facility cannot exceed $250.0 million. At September 30, 2017, the outstanding principal balance was $64.0 million on the facility and the interest rate was 6.25%.

Green Plains Trade has a $300.0 million senior secured asset-based revolving credit facility to finance working capital up to the maximum commitment based on eligible collateral. The facility matures in July of 2022. This facility can be increased by up to $70.0 million with agent approval. At September 30, 2017, the outstanding principal balance was $143.3 million on the facility and the interest rate was 3.52%.

On July 28, 2017, we amended the credit facility, to increase the maximum commitment from $150.0 million to $300.0 million and extend the maturity date to July 28, 2022. The amended credit facility increases advance rates and modifies the eligible inventory definitions to include additional commodities and locations. Advances are subject to variable interest rates equal to a daily LIBOR rate plus 2.25% or the base rate plus 1.25%. The unused portion of the credit facility is also subject to a commitment fee of 0.375% per annum.

*Food and Ingredients Segment*

Green Plains Cattle has a $300.0 million senior secured asset-based revolving credit facility to finance working capital up to the maximum commitment based on eligible collateral. The facility matures in April of 2020. This facility can be increase by up to $100.0 million with agent approval. At September 30, 2017, the outstanding principal balance was $246.7 million on the facility and our interest rate was 3.83%.

On April 28, 2017, we amended the credit facility to fund the additional working capital requirements related to the acquisition of two cattle feedlots located in Leoti, Kansas and Yuma, Colorado. The amendment increased the maximum commitment from $100.0 million to $200.0 million until July 31, 2017, at which time it increased to $300.0 million. The maturity date was extended from October 31, 2017 to April 30, 2020.

Advances under the revolving credit facility, as amended, are subject to variable interest rates equal to LIBOR plus 2.0% to 3.0% or the base rate plus 1.0% to 2.0%, depending on the preceding three months' excess borrowing availability. The amended credit facility also includes an accordion feature that enables the credit facility to be increased by up to $100.0 million with agent approval. The unused portion of the credit facility is also subject to a commitment fee of 0.20% to 0.30% per annum, depending on the preceding three months' excess borrowing availability. Interest is payable as required, but not less than quarterly in arrears and principal is due upon maturity.

The amended terms impose affirmative and negative covenants, including maintaining working capital of 15% of the commitment amount, tangible net worth of 20% of the commitment amount and a total debt to tangible net worth ratio of 3.50x. Capital expenditures are limited to $10.0 million per year under the credit facility, plus $10.0 million per year if funded by a contribution from the parent, plus unused amounts from the previous year.

*Partnership Segment*

Green Plains Partners, through a wholly owned subsidiary, has a $155.0 million secured revolving credit facility to fund working capital, acquisitions, distributions, capital expenditures and other general partnership purposes as of September 30, 2017. The facility can be increased by up to $100.0 million without the consent of the lenders. The facility matures in July of

2020. At September 30, 2017, the outstanding principal balance was $129.0 million on the facility and an average interest rate was 3.74%.

On October 27, 2017, the partnership upsized its revolving credit facility by $40 million, from $155 million to $195 million, by accessing a portion of the $100 million incremental commitment in place on the facility. For more information related to our debt, see *Note 8 – Debt* to the consolidated financial statements in this report.

***Contractual Obligations***

Contractual obligations as of September 30, 2017, were as follows (in thousands):

| | Payments Due By Period | | | | |
|---|---|---|---|---|---|
| **Contractual Obligations** | **Total** | **Less Than 1 Year** | **1-3 Years** | **3-5 Years** | **More Than 5 Years** |
| Long-term and short-term debt obligations (1) | $ 1,348,440 | $ 464,250 | $ 204,787 | $ 12,012 | $ 667,391 |
| Interest and fees on debt obligations (2) | 349,038 | 78,153 | 113,564 | 102,467 | 54,854 |
| Operating lease obligations (3) | 100,397 | 32,247 | 36,837 | 12,887 | 18,426 |
| Other | 9,042 | 2,722 | 1,403 | 2,398 | 2,519 |
| Purchase obligations: | | | | | |
| Forward grain purchase contracts (4) | 212,750 | 199,622 | 9,961 | 2,000 | 1,167 |
| Other commodity purchase contracts (5) | 241,695 | 230,687 | 11,008 | - | - |
| Other | 490 | 331 | 159 | - | - |
| Total contractual obligations | $ 2,261,852 | $ 1,008,012 | $ 377,719 | $ 131,764 | $ 744,357 |

(1) Includes the current portion of long-term debt and excludes the effect of any debt discounts and issuance costs.
(2) Interest amounts are calculated over the terms of the loans using current interest rates, assuming scheduled principal and interest amounts are paid pursuant to the debt agreements. Includes administrative and/or commitment fees on debt obligations.
(3) Operating lease costs are primarily for railcars and office space.
(4) Purchase contracts represent index-priced and fixed-price contracts. Index purchase contracts are valued at current quarter-end prices.
(5) Includes fixed-price ethanol, dried distillers grains and natural gas purchase contracts.

***Critical Accounting Policies and Estimates***

Key accounting policies, including, but not limited to, those relating to revenue recognition, depreciation of property and equipment, asset retirement obligations, impairment of long-lived assets and goodwill, derivative financial instruments, and accounting for income taxes, are impacted significantly by judgments, assumptions and estimates used in the preparation of the consolidated financial statements. Information about our critical accounting policies and estimates are included in our annual report on Form 10-K for the year ended December 31, 2016.

***Off-Balance Sheet Arrangements***

We do not have any off-balance sheet arrangements other than the operating leases, which are entered into during the ordinary course of business and disclosed in the *Contractual Obligations* section above.

**Item 3. Qualitative and Quantitative Disclosures about Market Risk.**

We use various financial instruments to manage and reduce our exposure to various market risks, including changes in commodity prices and interest rates. We conduct all of our business in U.S. dollars and are not currently exposed to foreign currency risk.

***Interest Rate Risk***

We are exposed to interest rate risk through our loans which bear interest at variable rates. Interest rates on our variable-rate debt are based on the market rate for the lender's prime rate or LIBOR. A 10% increase in interest rates would affect our interest cost by approximately $6.7 million per year. At September 30, 2017, we had $1.3 billion in debt, $1.1 billion of which had variable interest rates.

For additional information related to our debt, see *Note 8 – Debt* included as part of the notes to consolidated financial statements and *Note 11 – Debt* included as part of the notes to consolidated financial statements included in our annual report on Form 10-K for the year ended December 31, 2016.

***Commodity Price Risk***

Our business is highly sensitive to commodity price risk, particularly for ethanol, distillers grains, corn oil, corn, natural gas and cattle. Corn prices are affected by weather conditions, yield, changes in domestic and global supply and demand, and government programs and policies. Natural gas prices are influenced by severe weather in the summer and winter and hurricanes in the spring, summer and fall. Other factors include North American energy exploration and production, and the amount of natural gas in underground storage during injection and withdrawal seasons. Ethanol prices are sensitive to world crude oil supply and demand, the price of crude oil, gasoline and corn, the price of substitute fuels, refining capacity and utilization, government regulation and consumer demand for alternative fuels. Distillers grains prices are impacted by livestock numbers on feed, prices for feed alternatives and supply, which is associated with ethanol plant production. Cattle prices are impacted by weather conditions, overall economic conditions and government regulations.

To reduce the risk associated with fluctuations in the price of corn, natural gas, ethanol, distillers grains, corn oil and cattle, at times we use forward fixed-price physical contracts and derivative financial instruments, such as futures and options executed on the Chicago Board of Trade and the New York Mercantile Exchange. We focus on locking in favorable operating margins, when available, using a model that continually monitors market prices for corn, natural gas and other inputs relative to the price for ethanol and distillers grains at each of our production facilities. We create offsetting positions using a combination of forward fixed-price purchases, sales contracts and derivative financial instruments. As a result, we frequently have gains on derivative financial instruments that are offset by losses on forward fixed-price physical contracts or inventories and vice versa. Our results are impacted by a mismatch of gains or losses associated with the derivative instrument during a reporting period when the physical commodity purchases or sale has not yet occurred. During the three and nine months ended September 30, 2017, revenues included net losses of $2.5 million and $7.6 million, respectively, and cost of goods sold included net gains of $3.0 million and $23.9 million, respectively, associated with derivative financial instruments.

*Ethanol Production Segment*

In the ethanol production segment, net gains and losses from settled derivative instruments are offset by physical commodity purchases or sales to achieve the intended operating margins. To reduce commodity price risk caused by market fluctuations, we enter into exchange-traded futures and options contracts that serve as economic hedges.

Our exposure to market risk, which includes the impact of our risk management activities resulting from our fixed-price purchase and sale contracts and derivatives, is based on the estimated net income effect resulting from a hypothetical 10% change in price for the next 12 months starting on September 30, 2017, are as follows (in thousands):

| Commodity | Estimated Total Volume Requirements for the Next 12 Months (1) | Unit of Measure | Net Income Effect of Approximate 10% Change in Price |
|---|---|---|---|
| Ethanol | 1,470,000 | Gallons | $ 118,305 |
| Corn | 524,000 | Bushels | $ 121,574 |
| Distillers grains | 4,100 | Tons (2) | $ 23,993 |
| Corn Oil | 340,000 | Pounds | $ 6,487 |
| Natural gas | 41,700 | MmBTU | $ 5,900 |

(1) Estimated volumes reflect anticipated expansion of production capacity at our ethanol plants and assumes production at full capacity.
(2) Distillers grains quantities are stated on an equivalent dried ton basis.

*Agribusiness and Energy Services Segment*

In the agribusiness and energy services segment, our inventories, physical purchase and sale contracts and derivatives are marked to market. To reduce commodity price risk caused by market fluctuations for purchase and sale commitments of grain and grain held in inventory, we enter into exchange-traded futures and options contracts that serve as economic hedges.

The market value of exchange-traded futures and options used for hedging are highly correlated with the underlying market value of grain inventories and related purchase and sale contracts for grain. The less correlated portion of inventory

and purchase and sale contract market values, known as basis, is much less volatile than the overall market value of exchange-traded futures and tends to follow historical patterns. We manage this less volatile risk by constantly monitoring our position relative to the price changes in the market. Inventory values are affected by the month-to-month spread in the futures markets. These spreads are also less volatile than overall market value of our inventory and tend to follow historical patterns, but cannot be mitigated directly. Our accounting policy for futures and options, as well as the underlying inventory held for sale and purchase and sale contracts, is to reflect their current market values and include gains and losses in the consolidated statement of operations.

Our daily net commodity position consists of inventories related to purchase and sale contracts and exchange-traded contracts. The fair value of our position subject to market risk was approximately $0.4 million for grain based on market prices at September 30, 2017. Our market risk at that date, based on the estimated net income effect resulting from a hypothetical 10% change in price, was approximately $26 thousand.

*Food and Ingredients Segment*

In the food and ingredients segment, our physical purchase and sale contracts and derivatives are marked to market. To reduce commodity price risk caused by market fluctuations for purchase and sale commitments of cattle, we enter into exchange-traded futures and options contracts that serve as economic hedges.

The market value of exchange-traded futures and options used for hedging are highly correlated with the underlying market value of purchase and sale contracts for cattle. The less correlated portion of inventory and purchase and sale contract market values, known as basis, is much less volatile than the overall market value of exchange-traded futures and tends to follow historical patterns. We manage this less volatile risk by constantly monitoring our position relative to the price changes in the market. Inventory values are affected by the month-to-month spread in the futures markets. These spreads are also less volatile than overall market value of our inventory and tend to follow historical patterns, but cannot be mitigated directly. Our accounting policy for futures and options, as well as the underlying inventory held for sale and purchase and sale contracts, is to reflect their current market values and include gains and losses in the consolidated statement of operations.

Our daily net commodity position consists of inventories related to purchase and sale contracts and exchange-traded contracts. The fair value of our position subject to market risk was approximately $3.5 million for cattle based on market prices at September 30, 2017. Our market risk at that date, based on the estimated net income effect resulting from a hypothetical 10% change in price, was approximately $0.2 million.

Our daily net commodity position consists of inventories related to purchase and sale contracts and exchange-traded contracts. The fair value of our position subject to market risk was approximately $17.8 million for gain and other cattle feed based on market prices at September 30, 2017. Our market risk at that date, based on the estimated net income effect resulting from a hypothetical 10% change in price, was approximately $1.1 million.

**Item 4. Controls and Procedures.**

*Evaluation of Disclosure Controls and Procedures*

We maintain disclosure controls and procedures designed to ensure information that must be disclosed in the reports we file or submit under the Exchange Act is recorded, processed, summarized and reported within the time periods specified in the SEC's rules and forms, and that such information is accumulated and communicated to management, as appropriate, to allow timely decisions regarding required financial disclosure.

Under the supervision of and participation of our chief executive officer and chief financial officer, management carried out an evaluation of the effectiveness of the design and operation of our disclosure controls and procedures as of September 30, 2017, as defined in Rules 13a-15(e) and 15d-15(e) under the Exchange Act and concluded that our disclosure controls and procedures were effective.

*Changes in Internal Control over Financial Reporting*

Management is responsible for establishing and maintaining effective internal control over financial reporting to provide reasonable assurance regarding the reliability of our financial reporting and the preparation of our consolidated financial statements for external purposes in accordance with U.S. generally accepted accounting principles. There were no material changes in our internal control over financial reporting that occurred during the period covered by this report that have materially affected, or are reasonably likely to materially affect, our internal control over financial reporting.

## PART II – OTHER INFORMATION

### Item 1. Legal Proceedings.

We are currently involved in litigation that has arisen during the ordinary course of business. We do not believe this litigation will have a material adverse effect on our financial position, results of operations or cash flows.

### Item 1A. Risk Factors.

Investors should carefully consider the discussion of risks and the other information in our annual report on Form 10-K for the year ended December 31, 2016, in Part I, Item 1A, "Risk Factors," and the discussion of risks and other information in Part I, Item 2, "Management's Discussion and Analysis of Financial Condition and Results of Operations," under "Cautionary Information Regarding Forward-Looking Statements," of this report. Investors should also carefully consider the discussion of risks with the partnership under the heading "Risk Factors" and other information in their annual report on Form 10-K for the year ended December 31, 2016. Although we have attempted to discuss key factors, our investors need to be aware that other risks may prove to be important in the future. New risks may emerge at any time and we cannot predict such risks or estimate the extent to which they may affect our financial performance. The following risk factor supplements and/or updates risk factors previously disclosed and should be considered in conjunction with the other information included in, or incorporated by reference in, this quarterly report on Form 10-Q.

*Government mandates affecting ethanol usage could change and impact the ethanol market.*

Our operations could be adversely impacted by legislation or EPA actions, as set forth below or otherwise, that may reduce the RFS II mandate. Similarly, should federal mandates regarding oxygenated gasoline be repealed, the market for domestic ethanol could be adversely impacted. Economic incentives to blend based on the relative value of gasoline versus ethanol, taking into consideration the octane value of ethanol, environmental requirements and the RFS II mandate, may affect future demand. A significant increase in supply beyond the RFS II mandate could have an adverse impact on ethanol prices. Moreover, changes to RFS II could negatively impact the price of ethanol or cause imported sugarcane ethanol to become more economical than domestic ethanol.

Flexible-fuel vehicles, which are designed to run on a mixture of fuels such as E85, are eligible for vehicle manufacturer incentives in the form of CAFE credits. Flexible-fuel vehicle credits have been decreasing since 2014 and will be completely phased out by 2020, which may impact manufacturers' willingness to continue building flexible-fuel vehicles and ultimately result in slower E85 growth and lower ethanol prices.

Under the provisions of the EISA, Congress established a mandate setting the minimum volume of renewable fuels that must be blended with gasoline under the RFS II, which affects the domestic market for ethanol. The EPA has the authority to waive the requirements, in whole or in part, if there is inadequate domestic renewable fuel supply or the requirement severely harms the economy or the environment. After 2022, volumes shall be determined by the EPA in coordination with the Secretaries of Energy and Agriculture, taking into account such factors as impact on environment, energy security, future rates of production, cost to consumers, infrastructure, and other factors such as impact on commodity prices, job creation, rural economic development, or impact on food prices.

On July 5, 2017, the EPA proposed maintaining the RVOs for conventional ethanol at 15.0 billion gallons while lowering the volume obligations for advanced alternatives, reducing the overall biofuel target to 19.24 billion gallons for 2018. On September 26, 2017, the EPA issued a Notice of Data Availability for comment, proposing to further reduce the 2018 advanced biofuel volume requirement by 315 mmg, to 3.77 billion gallons, and the total renewable fuel requirement to 18.77 billion gallons, leaving conventional ethanol at 15.0 billion gallons. According to RFS II, if mandatory renewable fuel volumes are reduced by at least 20% for two consecutive years, the EPA is required to modify, or reset, statutory volumes through 2022. Since 2018 is the first year the total proposed RVOs are more than 20% below statutory levels, the EPA Administrator directed his staff to initiate the required technical analysis to perform any future reset consistent with the reset rules. If 2019 RVOs are also more than 20% below statutory levels, the RVO reset will be triggered under RFS II and the EPA will be required to modify statutory volumes through 2022 within one year of the trigger event, based on the same factors used to set the RVOs post-2022.

The U.S. Federal District Court for the D.C. Circuit ruled on July 28, 2017, in favor of the Americans for Clean Energy and its petitioners against the EPA related to its decision to lower the 2016 volume requirements. The Court concluded the EPA erred in how it interpreted the "inadequate domestic supply" waiver provision of RFS II, which authorizes the EPA to consider supply-side factors affecting the volume of renewable fuel available to refiners, blenders, and importers to meet the

statutory volume requirements. The waiver provision does not allow the EPA to consider the volume of renewable fuel available to consumers or the demand-side constraints that affect the consumption of renewable fuel by consumers. As a result, the Court vacated the EPA's decision to reduce the total renewable fuel volume requirements for 2016 through its waiver authority, which the EPA is expected to address. We believe this decision will benefit the industry overall, with the EPA's waiver analysis now limited to supply considerations only, and expect the primary impact will be on the RINs market.

On October 19, 2017, EPA Administrator Pruitt issued letter to seven Senators from Midwestern States reiterating his commitment to the text and spirit of the RFS. He stated that the EPA will meet the November 30, 2017 deadline for issuing RVOs, that the EPA's preliminary analysis suggests that final RVOs should be set at amounts at or greater than those provided on July 5, 2017, that EPA is actively exploring its authority to issue an RVP waiver and EPA will be pursuing action on RINs that involves ethanol exports.

On October 25, 2017, the Master Limited Partnership Parity Act was introduced in the Senate and House of Representatives (H.R. 4118), proposing to expand the definition of qualified sources of income to include clean energy resources, such as ethanol production, and infrastructure projects by publicly traded partnerships. Currently, qualifying income includes the transportation and storage of ethanol and certain specific alternative fuels.

**Item 2. Unregistered Sales of Equity Securities and Use of Proceeds.**

Employees surrender shares when restricted stock grants are vested to satisfy statutory minimum required payroll tax withholding obligations.

The following table lists the shares that were surrendered during the third quarter of 2017.

| Period | Total Number of Shares Withheld for Employee Awards | Average Price Paid per Share |
|---|---|---|
| July 1 - July 31 | - | $ - |
| August 1 - August 30 | 1,565 | 17.07 |
| September 1 - September 30 | 15,022 | 18.49 |
| Total | 16,587 | $ 18.36 |

In August 2014, we announced a share repurchase program of up to $100 million of our common stock. Under this program, we may repurchase shares in open market transactions, privately negotiated transactions, accelerated buyback programs, tender offers or by other means. The timing and amount of the transactions are determined by management based on its evaluation of market conditions, share price, legal requirements and other factors. The program may be suspended, modified or discontinued at any time, without prior notice.

The following table lists the shares repurchased under the share repurchase program during the third quarter of 2017.

| Period | Number of Shares Repurchased | Average Price Paid per Share | Total Number of Shares Repurchased as Part of Repurchase Program | Approximate Dollar Value of Shares that may yet be Repurchased under the Program (in thousands) |
|---|---|---|---|---|
| July 1 - July 31 | - | $ - | 514,990 | $ 89,993 |
| August 1 - August 30 | 285,849 | 17.10 | 800,839 | 85,097 |
| September 1 - September 30 | 50,000 | 16.70 | 850,839 | 84,260 |
| Total | 335,849 | $ 17.04 | 850,839 | $ 84,260 |

**Item 3. Defaults upon Senior Securities.**

None.

**Item 4. Mine Safety Disclosures.**

Not applicable.

**Item 5. Other Information.**

*Revolving Credit Facility Upsizing*

On October 27, 2017, the partnership upsized its revolving credit facility by $40 million, from $155 million to $195 million, accessing a portion of the $100 million incremental commitment in place on the facility. The credit increase is in accordance with the Incremental Joinder Agreement, which is filed as Exhibit 10.8 to this Quarterly Report on Form 10-Q and incorporated herein by reference.

**Item 6. Exhibits.**

**Exhibit Index**

| Exhibit No. | Description of Exhibit |
|---|---|
| 10.1 | Fourth Amended and Restated Revolving Credit and Security Agreement dated July 28, 2017, among Green Plains Trade Group LLC, the Lenders and PNC Bank, National Association as Lender and Agent (Incorporated by reference to Exhibit 10.1 to the company's Current Report on Form 8-K dated July 31, 2017) |
| 10.2(a) | Term Loan Agreement, dated as of August 29, 2017, among Green Plains Inc., BNP Paribas, as administrative agent and collateral agent and BNP Paribas Securities Corp., BMO Capital Markets Corp. and Merrill Lynch, Pierce, Fenner & Smith Incorporated, as joint lead arrangers and joint book runners (Incorporated by reference to Exhibit 10.1(a) to the company's Current Report on Form 8-K dated August 29, 2017) |
| 10.2(b) | Guaranty, dated as of August 29, 2017, in favor of BNP Paribas, as collateral agent and administrative agent, and the other lenders party to the Term Loan Agreement (Incorporated by reference to Exhibit 10.1(b) to the company's Current Report on Form 8-K dated August 29, 2017) |
| 10.2(c) | Pledge Agreement, dated as of August 29, 2017, among Green Plains Inc., its subsidiaries and BNP Paribas, as collateral agent (Incorporated by reference to Exhibit 10.1(c) to the company's Current Report on Form 8-K dated August 29, 2017) |
| 10.2(d) | Security Agreement, dated as of August 29, 2017, among Green Plains Inc., its subsidiaries and BNP Paribas, as collateral agent (Incorporated by reference to Exhibit 10.1(d) to the company's Current Report on Form 8-K dated August 29, 2017) |
| 10.2(e) | Term Loan Intercreditor and Collateral Agency Agreement, dated as of August 29, 2017, among BNP Paribas, as Term Loan Collateral Agent, BNP Paribas, as Pari Passu Collateral Agent, Bank of the West and ING Capital LLC, as ABL-Cattle Agent, BNP Paribas, as ABL-Grain Agent, PNC Bank, National Association, as ABL-Trade Agent, and acknowledged by Green Plains Inc. and new grantors (Incorporated by reference to Exhibit 10.1(e) to the company's Current Report on Form 8-K dated August 29, 2017) |
| 10.3(a) | Fourth Amendment to the Credit Agreement, dated as of August 29, 2017, among Green Plains Cattle Company LLC, Bank of the West and ING Capital LLC, as Joint Administrative Agents, and the lenders party to the Credit Agreement (Incorporated by reference to Exhibit 10.2(a) to the company's Current Report on Form 8-K dated August 29, 2017) |
| 10.3(b) | ABL Intercreditor Agreement, dated as of August 29, 2017, among Bank of the West and ING Capital LLC, as Joint ABL Collateral Agent, and BNP Paribas, as Term Loan Collateral Agent, and acknowledged by Green Plains Cattle Company LLC and the other ABL Grantors (Incorporated by reference to Exhibit 10.2(b) to the company's Current Report on Form 8-K dated August 29, 2017) |
| 10.3(c) | Guaranty, dated as of August 29, 2017, in favor of Bank of the West and ING Capital LLC, as joint administrative agents (Incorporated by reference to Exhibit 10.2(c) to the company's Current Report on Form 8-K dated August 29, 2017) |
| 10.4(a) | Eighth Amendment to Credit Agreement, dated as of August 29, 2017, among Green Plains Grain Company and BNP Paribas, as Administrative Agent, and the lenders party to the Credit Agreement (Incorporated by reference to Exhibit 10.3(a) to the company's Current Report on Form 8-K dated August 29, 2017) |
| 10.4(b) | ABL Intercreditor Agreement, dated as of August 29, 2017, among BNP Paribas, as ABL Collateral Agent, and BNP Paribas, as Term Loan Collateral Agent, and acknowledged by Green Plains Grain Company LLC and the other ABL Grantors (Incorporated by reference to Exhibit 10.3(b) to the company's Current Report on Form 8-K dated August 29, 2017) |
| 10.4(c) | Guaranty, dated as of August 29, 2017, in favor of BNP Paribas, as administrative agent (Incorporated by reference to Exhibit 10.3(c) to the company's Current Report on Form 8-K dated August 29, 2017) |
| 10.5(a) | First Amendment to Fourth Amended and Restated Revolving Credit and Security Agreement, dated as of August 29, 2017, among Green Plains Trade Group LLC and PNC Bank, National Association, as agent, and the lenders party to the Credit and Security Agreement (Incorporated by reference to Exhibit 10.4(a) to the company's Current Report on Form 8-K dated August 29, 2017) |
| 10.5(b) | ABL Intercreditor Agreement, dated as of August 29, 2017, among PNC Bank, National Association, as ABL Collateral Agent, and BNP Paribas, as Term Loan Collateral Agent, and acknowledged by Green Plains Trade Group LLC and the other ABL Grantors (Incorporated by reference to Exhibit 10.4(b) to the company's Current Report on Form 8-K dated August 29, 2017) |
| 10.5(c) | Guaranty, dated as of August 29, 2017, in favor of PNC Bank, National Association, as agent (Incorporated by reference to Exhibit 10.4(c) to the company's Current Report on Form 8-K dated August 29, 2017) |
| 10.6 | Employment Agreement with John Neppl (Incorporated by reference to Exhibit 10.1 to the company's Current Report on Form 8-K dated September 5, 2017) |

| | |
|---|---|
| 10.7 | First Amendment to Term Loan Agreement, dated October 16, 2017, among Green Plains, Inc. and BNP Paribas, as administrative agent and collateral agent |
| 10.8 | Incremental Joinder Agreement, dated October 27, 2017, among Green Plains Operating Company LLC and Bank of America, as Administrative |
| 31.1 | Certification of Chief Executive Officer pursuant to Rule 13a-14(a) and Section 302 of the Sarbanes-Oxley Act of 2002 |
| 31.2 | Certification of Chief Financial Officer pursuant to Rule 13a-14(a) and Section 302 of the Sarbanes-Oxley Act of 2002 |
| 32.1 | Certification of Chief Executive Officer pursuant to 18 U.S.C. Section 1350, as adopted pursuant to Section 906 of the Sarbanes-Oxley Act of 2002 |
| 32.2 | Certification of Chief Financial Officer pursuant to 18 U.S.C. Section 1350, as adopted pursuant to Section 906 of the Sarbanes-Oxley Act of 2002 |
| 101 | The following information from Green Plains Inc.'s Quarterly Report on Form 10-Q for the quarterly period ended September 30, 2017, formatted in Extensible Business Reporting Language (XBRL): (i) Consolidated Balance Sheets, (ii) Consolidated Statements of Operations, (iii) Consolidated Statements of Comprehensive Income, (iv) Consolidated Statements of Cash Flows, and (v) the Notes to Consolidated Financial Statements |

**SIGNATURES**

Pursuant to the requirements of the Securities Exchange Act of 1934, the Registrant has duly caused this report to be signed on its behalf by the undersigned hereunto duly authorized.

**GREEN PLAINS INC.**
(Registrant)

Date: November 2, 2017

By: */s/ Todd A. Becker*
Todd A. Becker
President and Chief Executive Officer
(Principal Executive Officer)

Date: November 2, 2017

By: */s/ John W. Neppl*
John W. Neppl
Chief Financial Officer
(Principal Financial Officer)

FIRST AMENDMENT TO TERM LOAN AGREEMENT

THIS FIRST AMENDMENT TO TERM LOAN AGREEMENT, dated as of October 16, 2017 (this "Amendment"), is among GREEN PLAINS INC. (the "Borrower"), the lenders signatory hereto (the "Lenders") and BNP PARIBAS, as administrative agent and as collateral agent (the "Administrative Agent").

WHEREAS, the Borrower, various financial institutions and the Administrative Agent are parties to a Term Loan Agreement, dated as of August 29, 2017 (the "Loan Agreement");

WHEREAS, pursuant to Section 14.1 of the Loan Agreement, the Borrower has requested that the Lenders and the Administrative Agent make certain amendments to the Loan Agreement as more particularly described herein; and

WHEREAS, the Administrative Agent and the Lenders constituting the Required Lenders are willing to make the amendments to the Loan Agreement provided herein, subject to the terms and conditions set forth herein.

NOW, THEREFORE, in consideration of the premises and for other good and valuable consideration the receipt and sufficiency of which is hereby acknowledged, the parties hereto agree as follows:

SECTION 1 Definitions. Capitalized terms used in this Amendment but not otherwise defined herein, shall have the same meanings given to them in the Loan Agreement.

SECTION 2 Amendments. Subject to the satisfaction of the conditions precedent set forth in Section 4, the Loan Agreement is amended as follows:

2.1 Amendment to Section 10.14. Section 10.14(e) is amended by replacing subclause (C) in its entirety with the following:

> "(C) historical financial statements (audited, if available, or unaudited or summary) for the most recently completed fiscal year of the business or Person to be acquired (if available, or such shorter period as may be available); and".

SECTION 3 REPRESENTATIONS AND WARRANTIES. To induce the other parties hereto to enter into this Amendment, each Loan Party hereby represents and warrants to the Administrative Agent and the other Lenders that, as of the date hereof:

3.1 Immediately prior to and after giving effect to this Amendment, no Unmatured Event of Default or Event of Default has occurred and is continuing;

3.2 Immediately prior to and after giving effect to this Amendment, all representations and warranties of the Loan Parties contained in the Loan Documents are true and correct in all material respects with the same effect as if made on and as of such date(s), except to the extent such representations and warranties specifically relate to an earlier date, in which case, such representations and warranties were true and correct in all material respects on and as of such earlier date (and except to the extent such representations and warranties are already qualified by

materiality in which case such representations and warranties were true and correct in all respects with the same effect as if made on and as of such date(s));

3.3 Each Loan Party is duly organized, validly existing and in good standing under the laws of its state or jurisdiction of incorporation or organization;

3.4 Each Loan Party is duly qualified and authorized to do business and is in good standing as a foreign entity in the jurisdictions where the character of its property or its business activities makes such qualification necessary, except with regard to jurisdictions where the failure to be so qualified or organized, or to be in good standing, as a foreign entity would not have a Material Adverse Effect;

3.5 Each Loan Party has the right and power and is duly authorized and empowered to enter into, execute and deliver the Amendment and to perform and observe the provisions hereof;

3.6 The Amendment has been duly authorized and approved by each Loan Party's Governing Body and has been duly executed and delivered by each Loan Party, and is the legal, valid and binding obligations of each Loan Party, enforceable against each Loan Party in accordance with its terms, except insofar as such enforcement may be limited by (i) applicable bankruptcy, insolvency, reorganization, moratorium, fraudulent transfer and other similar laws relating to or affecting the enforcement of creditors' rights generally and/or (ii) general principles of equity (regardless of whether such enforcement is considered in a proceeding at law or in equity); and

3.7 The execution, delivery and performance of the Amendment will not (i) conflict with, result in any breach in any of the provisions of, constitute a default under, or result in the creation of any Lien (other than Permitted Liens) upon any assets or property of the Loan Parties, under the provisions of, such Person's Organizational Documents or any material agreement to which such Person is a party or (ii) violate any law, rule, regulation, order, writ, judgment, injunction, decree, determination or award that is applicable to or binding on any Loan Party.

SECTION 4 EFFECTIVENESS. This Amendment shall not become effective unless and until each of the conditions precedent set forth below has been satisfied or the satisfaction thereof shall have been waived in writing by the Administrative Agent and the Required Lenders (the date of satisfaction or waiver of such conditions being referred to as the "Amendment Effective Date"):

4.1 Receipt by Administrative Agent of duly executed counterpart signature pages to this Amendment by (i) Lenders that constitute the Required Lenders, and (ii) the Company and each Guarantor;

4.2 The representations and warranties of the Loan Parties contained herein and in the other Loan Documents shall be true and correct in all material respects with the same effect as if made on and as of the Amendment Effective Date, except to the extent such representations and warranties specifically relate to an earlier date, in which case, such representations and warranties were true and correct in all respects on and as of such earlier date (and except to the extent such representations and warranties are already qualified by materiality in which case such

representations and warranties were true and correct in all respects with the same effect as if made on and as of such date).

4.3 No event shall have occurred and be continuing or would result from the effectiveness of this Amendment that would constitute an Event of Default or an Unmatured Event of Default; and

4.4 The Borrower shall have paid to Administrative Agent all invoiced reasonable costs and out-of-pocket expenses of the Administrative Agent owing to the Administrative Agent pursuant to Section 14.5 of the Loan Agreement incurred in connection with this Amendment (including without limitation all reasonable fees and expenses of Latham & Watkins LLP).

SECTION 5 REAFFIRMATION. Each Loan Party hereby (a) ratifies and reaffirms all of its payment and performance obligations, contingent or otherwise, and each grant of security interests and Liens in favor of the Administrative Agent or the Lenders, as the case may be, under each Loan Document to which it is a party, (b) agrees and acknowledges that the Liens in favor of the Administrative Agent and the Lenders under each Loan Document continue to constitute valid first priority Liens on substantially all of the Collateral and such Liens are not subject to avoidance, disallowance or subordination pursuant to any requirement of law, except as enforceability may be limited by applicable bankruptcy, insolvency, reorganization, moratorium or similar laws affecting the enforcement of creditors' rights generally or by general equitable principles (whether enforcement is sought by proceedings in equity or at law), (c) agrees and acknowledges that the Obligations constitute legal, valid and binding obligations of the Loan Parties, except as enforceability may be limited by applicable bankruptcy, insolvency, reorganization, moratorium or similar laws relating to or limiting creditors' rights generally and by general equitable principles (whether enforcement is sought by proceedings in equity or at law), and that (i) as of the Amendment Effective Date, no offsets, defenses or counterclaims to the Obligations or any other causes of action with respect to the Obligations or the Loan Documents exist and (ii) no portion of the Obligations is subject to avoidance, disallowance, reduction or subordination pursuant to any requirement of law, except as enforceability may be limited by applicable bankruptcy, insolvency, reorganization, moratorium or similar laws relating to or limiting creditors' rights generally and by general equitable principles (whether enforcement is sought by proceedings in equity or at law), (d) agrees that such ratification and reaffirmation is not a condition to the continued effectiveness of the Loan Documents, and (e) agrees that neither such ratification and reaffirmation, nor the Administrative Agent's nor any Lender's solicitation of such ratification and reaffirmation, constitutes a course of dealing giving rise to any obligation or condition requiring a similar or any other ratification or reaffirmation from each party to the Loan Agreement with respect to any subsequent modifications, consent or waiver with respect to the Loan Agreement or other Loan Documents. Each Loan Party acknowledges and agrees that any of the Loan Documents to which it is a party or otherwise bound shall continue in full force and effect and that all of its obligations thereunder shall be valid and enforceable, except as enforceability may be limited by applicable bankruptcy, insolvency, reorganization, moratorium or similar laws relating to or limiting creditors' rights generally or by general equitable principles (whether enforcement is sought by proceedings in equity or at law), and shall not be impaired or limited by the execution or effectiveness of this Amendment.

SECTION 6 MISCELLANEOUS.

6.1 Continuing Effectiveness, etc. As herein amended, the Loan Agreement shall remain in full force and effect and is hereby ratified and confirmed in all respects. After the effectiveness of this Amendment, all references in the Loan Agreement and the other Loan Documents to "Loan Agreement" or similar terms shall refer to the Loan Agreement as amended hereby. Each other Loan Document is hereby ratified, approved and confirmed in each and every respect.

6.2 Counterparts. This Amendment may be executed in any number of counterparts and by the different parties on separate counterparts, and each such counterpart shall be deemed to be an original but all such counterparts shall together constitute one and the same Amendment. Delivery of a counterpart hereof, or a signature hereto, by facsimile or by email in .pdf or similar format shall be effective as delivery of a manually- executed original counterpart hereof.

6.3 Governing Law. THIS AMENDMENT SHALL BE GOVERNED BY, AND CONSTRUED IN ACCORDANCE WITH, THE INTERNAL LAW OF THE STATE OF NEW YORK (WITHOUT REGARD TO CONFLICTS OF LAW PROVISIONS THEREOF)

6.4 Severability. Whenever possible each provision of this Amendment shall be interpreted in such manner as to be effective and valid under applicable law, but if any provision of this Amendment shall be prohibited by or invalid under applicable law, such provision shall be ineffective to the extent of such prohibition or invalidity, without invalidating the remainder of such provision or the remaining provisions of this Amendment. All obligations of the Loan Parties and rights of the Administrative Agent and the Lenders expressed herein or in any other Loan Document shall be in addition to and not in limitation of those provided by applicable law.

6.5 Incorporation of Loan Agreement Provisions. The provisions of Section 14.14 (Forum Selection and Consent to Jurisdiction) and Section 14.15 (Waiver of Jury Trial) of the Loan Agreement are incorporated by reference as if fully set forth herein, *mutatis mutandis*.

6.6 No Novation. By its execution of this Amendment, each of the parties hereto acknowledges and agrees that the terms of this Amendment do not constitute a novation, but, rather, a supplement of the terms of a pre-existing indebtedness and related agreement, as evidenced by the Loan Agreement.

6.7 Consent of Guarantors. Each Guarantor hereby (a) consents to this Amendment and the transactions contemplated hereby and (b) acknowledges and agrees that the guarantees (and all security therefor) contained in the Loan Agreement and the other Loan Documents previously executed by it are, and shall remain, in full force and effect after giving effect to this Amendment and all other prior modifications to the Loan Agreement, if any.

6.8 Unmatured Events of Default of Events Default. Nothing contained in this Amendment shall be construed or interpreted or is intended as a waiver of or limitation on any rights, powers, privileges or remedies that Administrative Agent or the Lenders have or may have under the Loan Agreement or any other Loan Document on account of any Unmatured Event of Default or Event of Default. Except as expressly set forth in this Amendment, nothing herein shall be deemed to entitle the Borrower or the Guarantors to a consent to, or a waiver, amendment, modification or other change of, any of the terms, conditions, obligations, covenants or agreements

contained in the Loan Agreement or the other Loan Documents in similar or different circumstances.

6.9 Lender Credit Decision. Each of the undersigned Lenders acknowledges that it has, independently and without reliance upon any other Lender and based on such documents and information as it has deemed appropriate, made its own credit analysis and decision to enter into this Amendment and to agree to the matters set forth herein. Each of the undersigned Lenders also acknowledges that it will, independently and without reliance upon any other Lender and based on such documents and information as it shall deem appropriate at the time, continue to make its own credit decisions in taking or not taking any action under the Loan Agreement.

6.10 Successors and Assigns. This Amendment shall be binding upon the Borrower, the Lenders and the Administrative Agent and their respective successors and assigns, and shall inure to the benefit of the Borrower, the Lenders and the Administrative Agent and the respective successors and assigns of the Lenders and the Administrative Agent.

6.11 Loan Document. This Amendment is a Loan Document.

*[Signature Pages Follow]*

IN WITNESS WHEREOF, this Amendment has been duly executed and delivered as of the day and year first above written.

GREEN PLAINS INC.,
as the Borrower

By: /s/ Michelle Mapes
Name: Michelle Mapes
Title: EVP – General Counsel and Corp. Secretary

**GUARANTORS:**

GREEN PLAINS I LLC

By: /s/ Michelle Mapes
Name: Michelle Mapes
Title: EVP – General Counsel and Corp. Secretary

GREEN PLAINS II LLC

By: /s/ Michelle Mapes
Name: Michelle Mapes
Title: EVP – General Counsel and Corp. Secretary

FLEISCHMANN'S VINEGAR COMPANY, INC.

By: /s/ Michelle Mapes
Name: Michelle Mapes
Title: EVP – General Counsel and Corp. Secretary

GREEN PLAINS AGRICULTURAL AND ENERGY FUND LLC

By: /s/ Michelle Mapes
Name: Michelle Mapes
Title: EVP – General Counsel and Corp. Secretary

GREEN PLAINS ASSET MANAGEMENT LLC

By: /s/ Michelle Mapes
Name: Michelle Mapes
Title: EVP – General Counsel and Corp. Secretary

GREEN PLAINS COMMODITY MANAGEMENT LLC

By: /s/ Michelle Mapes
Name: Michelle Mapes
Title: EVP – General Counsel and Corp. Secretary

GREEN PLAINS CATTLE COMPANY LLC

By: /s/ Michelle Mapes
Name: Michelle Mapes
Title: EVP – General Counsel and Corp. Secretary

GREEN PLAINS GRAIN COMPANY LLC

By: /s/ Michelle Mapes
Name: Michelle Mapes
Title: EVP – General Counsel and Corp. Secretary

GREEN PLAINS GRAIN COMPANY TN LLC

By: /s/ Michelle Mapes
Name: Michelle Mapes
Title: EVP – General Counsel and Corp. Secretary

GREEN PLAINS INDUSTRIAL CLEANING SERVICES LLC

By: /s/ Michelle Mapes
Name: Michelle Mapes
Title: EVP – General Counsel and Corp. Secretary

GREEN PLAINS TRADE GROUP LLC

By: /s/ Michelle Mapes
Name: Michelle Mapes
Title: EVP – General Counsel and Corp. Secretary

GREEN PLAINS TRUCKING LLC

By: /s/ Michelle Mapes
Name: Michelle Mapes
Title: EVP – General Counsel and Corp. Secretary

GREEN PLAINS HEREFORD LLC

By: /s/ Michelle Mapes
Name: Michelle Mapes
Title: EVP – General Counsel and Corp. Secretary

GREEN PLAINS HOPEWELL LLC

By: /s/ Michelle Mapes
Name: Michelle Mapes
Title: EVP – General Counsel and Corp. Secretary

GREEN PLAINS MADISON LLC

By: /s/ Michelle Mapes
Name: Michelle Mapes
Title: EVP – General Counsel and Corp. Secretary

GREEN PLAINS MOUNT VERNON LLC

By: /s/ Michelle Mapes
Name: Michelle Mapes
Title: EVP – General Counsel and Corp. Secretary

GREEN PLAINS YORK LLC

By: /s/ Michelle Mapes
Name: Michelle Mapes
Title: EVP – General Counsel and Corp. Secretary

GREEN PLAINS PROCESSING LLC

By: /s/ Michelle Mapes
Name: Michelle Mapes
Title: EVP – General Counsel and Corp. Secretary

GREEN PLAINS ATKINSON LLC

By: /s/ Michelle Mapes
Name: Michelle Mapes
Title: EVP – General Counsel and Corp. Secretary

GREEN PLAINS BLUFFTON LLC

By: /s/ Michelle Mapes
Name: Michelle Mapes
Title: EVP – General Counsel and Corp. Secretary

GREEN PLAINS CENTRAL CITY LLC

By: /s/ Michelle Mapes
Name: Michelle Mapes
Title: EVP – General Counsel and Corp. Secretary

GREEN PLAINS COMMODITIES LLC

By: /s/ Michelle Mapes
Name: Michelle Mapes
Title: EVP – General Counsel and Corp. Secretary

GREEN PLAINS CORN OIL LLC

By: /s/ Michelle Mapes
Name: Michelle Mapes
Title: EVP – General Counsel and Corp. Secretary

GREEN PLAINS FAIRMONT LLC

By: /s/ Michelle Mapes
Name: Michelle Mapes
Title: EVP – General Counsel and Corp. Secretary

GREEN PLAINS HOLDINGS II LLC

By: /s/ Michelle Mapes
Name: Michelle Mapes
Title: EVP – General Counsel and Corp. Secretary

GREEN PLAINS OBION LLC

By: /s/ Michelle Mapes
Name: Michelle Mapes
Title: EVP – General Counsel and Corp. Secretary

GREEN PLAINS ORD LLC

By: /s/ Michelle Mapes
Name: Michelle Mapes
Title: EVP – General Counsel and Corp. Secretary

GREEN PLAINS OTTER TAIL LLC

By: /s/ Michelle Mapes
Name: Michelle Mapes
Title: EVP – General Counsel and Corp. Secretary

GREEN PLAINS SHENANDOAH LLC

By: /s/ Michelle Mapes
Name: Michelle Mapes
Title: EVP – General Counsel and Corp. Secretary

GREEN PLAINS SUPERIOR LLC

By: /s/ Michelle Mapes
Name: Michelle Mapes
Title: EVP – General Counsel and Corp. Secretary

GREEN PLAINS WOOD RIVER LLC

By: /s/ Michelle Mapes
Name: Michelle Mapes
Title: EVP – General Counsel and Corp. Secretary

BNP PARIBAS,
as Administrative Agent and Lender

By: /s/ James McHale
Name: James McHale
Title: Managing Director

By: /s/ Andrew Shapiro
Name: Andrew Shapiro
Title: Managing Director

CoBank, ACB
as a Lender

By: /s/ Robert Prickett
Name: Robert Prickett
Title: Vice President

AgCountry Farm Credit Services, FLCA
as a Lender

By: /s/ Nicole Schwartz
Name: Nicole Schwartz
Title: Vice President

[Signature Page to First Amendment to Term Loan Agreement]

Compeer Financial, PCA
as a Lender

By: /s/ Lee Fuchs
Name: Lee Fuchs
Title: Director, Capital Markets

Farm Credit Mid-American PCA,
as a Lender

By: /s/ Josh Bloyd
Name: Josh Bloyd
Title: Credit Officer

[Signature Page to First Amendment to Term Loan Agreement]

---

AloStar Bank of Commerce
as a Lender

By: /s/ Daryn Veney
Name: Daryn Veney
Title: Vice President

[Signature Page to First Amendment to Term Loan Agreement]

KVK CLO 2014-2 Ltd.
as a Lender

By: /s/ David Cifonelli
Name: David Cifonelli
Title: Vice President

KVK CLO 2014-3 Ltd.
as a Lender

By: /s/ David Cifonelli
Name: David Cifonelli
Title: Vice President

KVK CLO 2015-1 Ltd.
as a Lender

By: /s/ David Cifonelli
Name: David Cifonelli
Title: Vice President

KVK CLO 2016-1 Ltd.
as a Lender

By: /s/ David Cifonelli
Name: David Cifonelli
Title: Vice President

[Signature Page to First Amendment to Term Loan Agreement]

Farm Credit Services of America, FLCA
as a Lender

By: /s/ Kathryn J. Frahm
Name: Kathryn J. Frahm
Title: Vice President

[Signature Page to First Amendment to Term Loan Agreement]

Mackenzie Floating Rate Income Fund
IG Mackenzie Floating Rate Income Fund
Mackenzie Floating Rate Income ETF
Mackenzie Unconstrained Fixed Income Fund
Mackenzie Strategic Income Fund
Symmetry Candadian Bond Fund – 3864SLF
Mackenzie Unconstrained Bond ETF
Mackenzie Income Fund
Mackenzie Global Strategic Income Fund
Mackenzie Global Credit Opportunities Fund
IG Mackenzie Strategic Income Fund
Mackenzie Cundill Canadian Balanced Fund
Mackenzie Global Tactical Bond Fund
Mackenzie Canadian Short Term Income Fund
Mackenzie Ivy Global Balanced Fund
IG Mackenzie Ivy Canadian Balanced Fund
Manulife Sentinel Income (33) Fund UT
Mackenzie Canadian Growth Balanced Fund
Mackenzie Global High Yield Fixed Income ETF
Mackenzie Strategic Bond Fund
Mackenzie Ivy Canadian Balanced Fund
Mackenzie Canadian All Cap Balanced Fund
Mackenzie Diversified Alternatives Fund
London Life Income Fund 2.26MF
Mackenzie Canadian Large Cap Balanced Fund
Mackenzie Investments Grade Floating Rate Fund
Mackenzie Gobal Tactical Investments Grade Bond Fund
Mackenzie Core Plus Global Fixed Income ETF
Great-West Life Income Fund 6.06M
London Life Growth and Income Fund 2.27MF
Mackenzie Core Plus Canadian Fixed Income ETF
Mackenzie USD Global Strategic Income Fund
Mackenzie USD Ultra Short Duration Income Fund
Mackenzie USD Global Tactical Bond Fund
Great-West Life Growth and Income Fund 6.05M
as a Lender

By: /s/ Movin Mokbel
Name: Movin Mokbel
Title: VP, Investments

By: /s/ Felix Wong
Name: Felix Wong
Title: VP, Investments

CAPITAL FARM CREDIT, FLCA,
as a Lender

By: /s/ Donald L. Palm
Name: Donald L. Palm
Title: SVP/Capital Markets

AMMC CLO 15, LIMITED
as a Lender
BY: American Money Management Corp., as Collateral Manager

By: /s/ David P. Meyer
Name: David P. Meyer
Title: Senior Vice President

AMMC CLO 16, LIMITED
as a Lender
By: American Money Management Corp., as Collateral Manager

By: /s/ David P. Meyer
Name: David P. Meyer
Title: Senior Vice President

AMMC CLO 17, LIMITED
as a Lender
By: American Money Management Corp., as Collateral Manager

By: /s/ David P. Meyer
Name: David P. Meyer
Title: Senior Vice President

AMMC CLO 18, LIMITED
as a Lender
By: American Money Management Corp., as Collateral Manager

By: /s/ David Meyer
Name: David Meyer
Title: Senior Vice President

AMMC CLO 21, LIMITED
as a Lender
By: American Money Management Corp., as Collateral Manager

By: /s/ David Meyer
Name: David Meyer
Title: Senior Vice President

American Beacon Sound Point Floating Rate
Income Fund, a series of American Beacon Funds
as Lender
BY: Sound Point Capital Management, LP
as Sub-Advisor

By: /s/ Andrew Wright
Name: Andrew Wright
Title: Authorized Signatory

Commonwealth of Pennsylvania, Treasury Department
as a Lender
BY: Sound Point Capital Management, LP as
Investment Advisor

By: /s/ Andrew Wright
Name: Andrew Wright
Title: Authorized Signatory

Kaiser Foundation Hospitals
as a Lender
By: Sound Point Capital Management, LP as
Investment Advisor

By: /s/ Andrew Wright
Name: Andrew Wright
Title: Authorized Signatory

Kaiser Permanente Group Trust
as a Lender
By: Sound Point Capital Management, LP as Manager

By: /s/ Andrew Wright
Name: Andrew Wright
Title: Authorized Signatory

Neuberger Berman Investment Funds Plc
as a Lender
BY: Sound Point Capital Management, LP
as Sub Investment Advisor

By: /s/ Andrew Wright
Name: Andrew Wright
Title: Authorized Signatory

Principal Funds, Inc. – Global Multi-Strategy Fund
as a Lender
By: Sound Point Capital Management, LP
as Sub Advisor

By: /s/ Andrew Wright
Name: Andrew Wright
Title: Authorized Signatory

Sound Point CLO IV, Ltd
as a Lender
BY: Sound Point Capital Management, LP
as Collateral Manager

By: /s/ Andrew Wright
Name: Andrew Wright
Title: Authorized Signatory

Sound Point CLO IX, Ltd.
as a Lender

By: /s/ Andrew Wright
Name: Andrew Wright
Title: Authorized Signatory

Sound Point CLO V, Ltd.
as a Lender
By: Sound Point Capital Management, LP
as Collateral Manager

By: /s/ Andrew Wright
Name: Andrew Wright
Title: Authorized Signatory

[Signature Page to First Amendment to Term Loan Agreement]

Sound Point CLO VI, Ltd.
as a Lender
By: Sound Point Capital Management, LP
as Collateral Manager

By: /s/ Andrew Wright
Name: Andrew Wright
Title: Authorized Signatory

Sound Point CLO VII, Ltd.
as a Lender
By: Sound Point Capital Management, LP
as Collateral Manager

By: /s/ Andrew Wright
Name: Andrew Wright
Title: Authorized Signatory

Sound Point CLO VIII, Ltd.
as a Lender
By: Sound Point Capital Management, LP
as Collateral Manager

By: /s/ Andrew Wright
Name: Andrew Wright
Title: Authorized Signatory

Sound Point CLO XI, Ltd.
as a Lender
By: Sound Point Capital Management, LP
as Collateral Manager

By: /s/ Andrew Wright
Name: Andrew Wright
Title: Authorized Signatory

[Signature Page to First Amendment to Term Loan Agreement]

Sound Point CLO XII, Ltd.
as a Lender
By: Sound Point Capital Management, LP
as Collateral Manager

By: /s/ Andrew Wright
Name: Andrew Wright
Title: Authorized Signatory

Sound Point CLO XIV, Ltd.
as a Lender
By: Sound Point Capital Management, LP
as Collateral Manager

By: /s/ Andrew Wright
Name: Andrew Wright
Title: Authorized Signatory

Sound Point CLO XVI, LTD.
as a Lender
By: Sound Point Capital Management, LP
as Collateral Manager

By: /s/ Andrew Wright
Name: Andrew Wright
Title: Authorized Signatory

Sound Point CLO XVII, Ltd.
as a Lender
By: Sound Point Capital Management, LP
as Collateral Manager

By: /s/ Andrew Wright
Name: Andrew Wright
Title: Authorized Signatory

Sound Point Credit Opportunities Master Fund, LP
as a Lender
By: Sound Point Capital Management, LP
as Investor Advisor

By: /s/ Andrew Wright
Name: Andrew Wright
Title: Authorized Signatory

Sound Point Montauk Fund, L.P.
as a Lender
By: Sound Point Capital Management, LP
as Investment Manager

By: /s/ Andrew Wright
Name: Andrew Wright
Title: Authorized Signatory

Sound Point Senior Floating Rate Master Fund L.P.
as a Lender
BY: Sound Point Capital Management, LP
as Investment Manager

By: /s/ Andrew Wright
Name: Andrew Wright
Title: Authorized Signatory

Teamsters Pension Trust Fund of Philadelphia & Vicinity
as a Lender
By: Sound Point Capital Management, LP
as Investment Advisor

By: /s/ Andrew Wright
Name: Andrew Wright
Title: Authorized Signatory

FCS Commercial Finance Group, for
AgCountry Farm Credit Services, PCA,
as Lender

By: /s/ Daniel J. Best
Name: Daniel J. Best
Title: Vice President

[Signature Page to First Amendment to Term Loan Agreement]

---

METROPOLITAN LIFE INSURANCE COMPANY
as Lender

By: /s/ Joseph K. Herrmann
Name: Joseph K. Herrmann
Title: Director

AGF Floating Rate Income Fund
as Lender
By: Eaton Vance Management as Portfolio Manager

By: /s/ Michael Brotthof
Name: Michael Brotthof
Title: Vice President

Brighthouse Funds Trust I – Brighthouse/Eaton
Vance Floating Rate Portfolio
as Lender
By: Eaton Vance Management
as Investment Sub-Advisor

By: /s/ Michael Brotthof
Name: Michael Brotthof
Title: Vice President

Columbia Funds Variable Series Trust II – Variable Portfolio – Eaton Vance Floating-Rate Income Fund
as Lender
By: Eaton Vance Management
as Investment Sub-Advisor

By: /s/ Michael Brotthof
Name: Michael Brotthof
Title: Vice President

DaVinci Reinsurance Ltd.
as Lender
By: Eaton Vance Management
as Investment Advisor

By: /s/ Michael Brotthof
Name: Michael Brotthof
Title: Vice President

Eaton Vance CLO 2013-1 LTD.
as Lender
BY: Eaton Vance Management
Portfolio Manager

By: /s/ Michael Brotthof
Name: Michael Brotthof
Title: Vice President

[Signature Page to First Amendment to Term Loan Agreement]

---

Eaton Vance CLO 2014-1 LTD.
as Lender
BY: Eaton Vance Management
Portfolio Manager

By: /s/ Michael Brotthof
Name: Michael Brotthof
Title: Vice President

Eaton Vance CLO 2015-1 LTD.
as Lender
BY: Eaton Vance Management
Portfolio Manager

By: /s/ Michael Brotthof
Name: Michael Brotthof
Title: Vice President

Eaton Vance Floating Rate Portfolio
as Lender
BY: Boston Management and Research
as Investment Advisor

By: /s/ Michael Brotthof
Name: Michael Brotthof
Title: Vice President

Eaton Vance Floating Rate 2022 Target Term Trust
as Lender
BY: Eaton Vance Management
as Investment Advisor

By: /s/ Michael Brotthof
Name: Michael Brotthof
Title: Vice President

Eaton Vance Floating-Rate Income Plus Fund
as Lender
BY: Eaton Vance Management
as Investment Advisor

By: /s/ Michael Brotthof
Name: Michael Brotthof
Title: Vice President

[Signature Page to First Amendment to Term Loan Agreement]

Eaton Vance Floating-Rate Income Trust
as Lender
BY: Eaton Vance Management
as Investment Advisor

By: /s/ Michael Brotthof
Name: Michael Brotthof
Title: Vice President

Eaton Vance Institutional Senior Loan Fund
as Lender
BY: Eaton Vance Management
as Investment Advisor

By: /s/ Michael Brotthof
Name: Michael Brotthof
Title: Vice President

Eaton Vance Institutional Senior Loan Plus Fund
as Lender
BY: Eaton Vance Management
as Investment Advisor

By: /s/ Michael Brotthof
Name: Michael Brotthof
Title: Vice President

Eaton Vance International (Cayman Islands) Floating-Rate Income Portfolio
as Lender
BY: Eaton Vance Management
as Investment Advisor

By: /s/ Michael Brotthof
Name: Michael Brotthof
Title: Vice President

Eaton Vance Limited Duration Income Fund
as Lender
BY: Eaton Vance Management
as Investment Advisor

By: /s/ Michael Brotthof
Name: Michael Brotthof
Title: Vice President

Eaton Vance Loan Holding Limited
as Lender
BY: Eaton Vance Management
as Investment Manager

By: /s/ Michael Brotthof
Name: Michael Brotthof
Title: Vice President

Eaton Vance Senior Floating-Rate Trust
as Lender
BY: Eaton Vance Management
as Investment Advisor

By: /s/ Michael Brotthof
Name: Michael Brotthof
Title: Vice President

Eaton Vance Senior Income Trust
as Lender
BY: Eaton Vance Management
as Investment Advisor

By: /s/ Michael Brotthof
Name: Michael Brotthof
Title: Vice President

Eaton Vance Short Duration Diversified Income Fund
as Lender
BY: Eaton Vance Management
as Investment Advisor

By: /s/ Michael Brotthof
Name: Michael Brotthof
Title: Vice President

Eaton Vance US Loan Fund 2016 a Series Trust
of Global Cayman Investment Trust
as Lender
BY: Eaton Vance Management
as Investment Advisor

By: /s/ Michael Brotthof
Name: Michael Brotthof
Title: Vice President

Eaton Vance VT Floating-Rate Income Fund
as Lender
BY: Eaton Vance Management
as Investment Advisor

By: /s/ Michael Brotthof
Name: Michael Brotthof
Title: Vice President

Florida Power & Light Company
as Lender
BY: Eaton Vance Management
as Investment Advisor

By: /s/ Michael Brotthof
Name: Michael Brotthof
Title: Vice President

Pacific Select Fund Floating Rate Loan Portfolio
as Lender
BY: Eaton Vance Management
as Investment Sub- Advisor

By: /s/ Michael Brotthof
Name: Michael Brotthof
Title: Vice President

Renaissance Investment Holdings Ltd
as Lender
By: Eaton Vance Management
as Investment Advisor

By: /s/ Michael Brotthof
Name: Michael Brotthof
Title: Vice President

Senior Debt Portfolio
as Lender
By: Boston Management and Research
as Investment Advisor

By: /s/ Michael Brotthof
Name: Michael Brotthof
Title: Vice President

ABN AMRO CAPITAL USA LLC,
as Lender

By: /s/ Adriano Eehavarria
Name: Adriano Eehavarria
Title: Vice President

By: /s/ Vincent E. Lisanti
Name: Vincent E. Lisanti
Title: Managing Director

[Signature Page to First Amendment to Term Loan Agreement]

CBAM 2017-1, LTD.,
as Lender

By: /s/ John H. Garrett
Name: John H. Garrett
Title: Managing Director

CBAM 2017-2, LTD.,
as Lender

By: /s/ John H. Garrett
Name: John H. Garrett
Title: Managing Director

CBAM 2017-3, LTD.,
as Lender

By: /s/ John H. Garrett
Name: John H. Garrett
Title: Managing Director

[Signature Page to First Amendment to Term Loan Agreement]

CBAM 2017-4, LTD.,
as Lender

By: /s/ John H. Garrett
Name: John H. Garrett
Title: Managing Director

Regatta II Funding LP
as Lender
By: Napier Park Global Capital (US) LP
Attorney-in-fact

By: /s/ Melanie Hanlon
Name: Melanie Hanlon
Title: Managing Director

Regatta III Funding Ltd
as Lender
By: Napier Park Global Capital (US) LP
Attorney-in-fact

By: /s/ Melanie Hanlon
Name: Melanie Hanlon
Title: Managing Director

[Signature Page to First Amendment to Term Loan Agreement]

Regatta IV Funding Ltd
as Lender
By: Napier Park Global Capital (US) LP
Attorney-in-fact

By: /s/ Melanie Hanlon
Name: Melanie Hanlon
Title: Managing Director

REGATTA IX FUNDING LTD.
as Lender
By: Regatta Loan Management LLC
its Collateral Manager

By: /s/ Melanie Hanlon
Name: Melanie Hanlon
Title: Managing Director

Regatta V Funding Ltd
as Lender
BY: Napier Park Global Capital (US) LP
Attorney-in-fact

By: /s/ Melanie Hanlon
Name: Melanie Hanlon
Title: Managing Director

Regatta VI Funding Ltd.
as Lender
By: Regatta Loan Management LLC
its Collateral Manager

By: /s/ Melanie Hanlon
Name: Melanie Hanlon
Title: Managing Director

Regatta VII Funding Ltd
as Lender
By: Regatta Loan Management LLC
its Collateral Manager

By: /s/ Melanie Hanlon
Name: Melanie Hanlon
Title: Managing Director

[Signature Page to First Amendment to Term Loan Agreement]

REGATTA VIII FUNDING LTD.
as Lender
By: Regatta Loan Management LLC
its Collateral Manager

By: /s/ Melanie Hanlon
Name: Melanie Hanlon
Title: Managing Director

[Signature Page to First Amendment to Term Loan Agreement]

REGATTA X FUNDING LTD.
as Lender
By: Regatta Loan Management LLC
Attorney-in-fact

By: /s/ Melanie Hanlon
Name: Melanie Hanlon
Title: Managing Director

THL Credit Logan JV SPV I LLC
as a Lender
By: THL Credit Logan JV LLC,
its Designated Manager

By: /s/ Chris Flynn
Name: Chris Flynn
Title: Director

THL Credit Wind River 2012-1 CLO Ltd.
as a Lender
By: THL Credit Senior Loan Strategies LLC,
as Investment Manager

By: /s/ James R. Fellows
Name: James R. Fellows
Title: Managing Director/Co-Head

THL CREDIT WIND RIVER 2013-1 CLO LTD.
as a Lender
By: THL Credit Senior Loan Strategies LLC,
as Investment Manager

By: /s/ James R. Fellows
Name: James R. Fellows
Title: Managing Director/Co-Head

THL Credit Wind River 2014-3 CLO Ltd.
as a Lender
By: THL Credit Senior Loan Strategies LLC,
as Manager

By: /s/ James R. Fellows
Name: James R. Fellows
Title: Managing Director/Co-Head

THL Credit Wind River 2015-1 CLO Ltd.
as a Lender
By: THL Credit Senior Loan Strategies LLC,
as Manager

By: /s/ James R. Fellows
Name: James R. Fellows
Title: Managing Director/Co-Head

THL Credit Wind River 2015-2 CLO Ltd.
as a Lender
By: THL Credit Senior Loan Strategies LLC,
its Manager

By: /s/ James R. Fellows
Name: James R. Fellows
Title: Managing Director/Co-Head

THL Credit Wind River 2016-1 CLO Ltd.
as a Lender
By: THL Credit Senior Loan Strategies LLC,
its Manager

By: /s/ James R. Fellows
Name: James R. Fellows
Title: Managing Director/Co-Head

THL Credit Wind River 2016-2 CLO Ltd.
as a Lender
By: THL Credit Senior Loan Strategies LLC,
its Warehouse Manager

By: /s/ James R. Fellows
Name: James R. Fellows
Title: Managing Director/Co-Head

[Signature Page to First Amendment to Term Loan Agreement]

THL Credit Wind River 2017-1 CLO Ltd.
as a Lender
By THL Credit Advisors LLC,
its Warehouse Collateral Manager

By: /s/ James R. Fellows
Name: James R. Fellows
Title: Managing Director/Co-Head

THL Credit Wind River 2017-2 CLO Ltd.
as a Lender
By: THL Credit Advisors LLC,
its Asset Manager

By: /s/ James R. Fellows
Name: James R. Fellows
Title: Managing Director/Co-Head

THL Credit Wind River 2017-3 CLO Ltd.
as a Lender
By: THL Credit Advisors LLC,
its Warehouse Collateral Manager

By: /s/ James R. Fellows
Name: James R. Fellows
Title: Managing Director/Co-Head

THL CREDIT WIND RIVER 2017-4 CLO LTD
as a Lender
By: THL Credit Advisors LLC,
as Warehouse Collateral Manager

By: /s/ James R. Fellows
Name: James R. Fellows
Title: Managing Director/Co-Head

Buffalo High Yield Fund,
as a Lender

By: /s/ Alicia Marthaler
Name: Alicia Marthaler
Title: Attorney-in-fact

BlackRock Funds II, BlackRock Strategic Income
Opportunities Portfolio
as a Lender
By: BlackRock Advisors, LLC,
its Investment Advisor

By: /s/ Rob Jacobi
Name: Rob Jacobi
Title: Authorized Signatory

Strategic Income Opportunities Bond Fund
as a Lender
BY: BlackRock Institutional Trust Company, NA,
not in its individual capacity but as Trustee of the
Strategic Income Opportunities Bond Fund

By: /s/ Rob Jacobi
Name: Rob Jacobi
Title: Authorized Signatory

BCA Loan Funding LLC
as a Lender
By: Citibank, NA

By: /s/ Cynthia Gonzalvo
Name: Cynthia Gonzalvo
Title: Associate Director

Citi Loan Funding BR MUST LLC,
as a Lender
By: Citibank, NA.,

By: /s/ Cynthia Gonzalvo
Name: Cynthia Gonzalvo
Title: Associate Director

Citi Loan Funding BR 534 LLC
as a Lender
By: Citibank, NA.,

By: /s/ Cynthia Gonzalvo
Name: Cynthia Gonzalvo
Title: Associate Director

Benfit Street Partners CLO II, Ltd.
as a Lender

By: /s/ Todd Marsh
Name: Todd Marsh
Title: Authorized Signer

Benfit Street Partners CLO III, Ltd.
as a Lender

By: /s/ Todd Marsh
Name: Todd Marsh
Title: Authorized Signer

Benfit Street Partners CLO IX, Ltd.
as a Lender

By: /s/ Todd Marsh
Name: Todd Marsh
Title: Authorized Signer

Benfit Street Partners CLO VI, Ltd.
as a Lender

By: /s/ Todd Marsh
Name: Todd Marsh
Title: Authorized Signer

Benfit Street Partners CLO VIII, Ltd.
as a Lender

By: /s/ Todd Marsh
Name: Todd Marsh
Title: Authorized Signer

Benfit Street Partners CLO XI, Ltd.
as a Lender

By: /s/ Todd Marsh
Name: Todd Marsh
Title: Authorized Signer

Benefit Street Partners CLO XII, Ltd.
as a Lender

By: /s/ Todd Marsh
Name: Todd Marsh
Title: Authorized Signer

# INCREMENTAL JOINDER AGREEMENT

Effective Date: October 27, 2017

Reference is made to the Credit Agreement dated as of July 1, 2015 (as amended, modified, extended or restated from time to time, the "Credit Agreement") among Green Plains Operating Company LLC, a Delaware limited liability company (the "Borrower"), the Guarantors from time to time party thereto, the Lenders from time to time party thereto, and Bank of America, N.A., as Administrative Agent . All of the defined terms in the Credit Agreement are incorporated herein by reference.

1. Incremental Commitments. Pursuant to Section 2.16 of the Credit Agreement, the Borrower has notified the Administrative Agent of its intent to institute Incremental Commitments in an aggregate principal amount of $40,000,000. Effective as of the Effective Date set forth above, each Lender and New Lender (as defined below) listed on the signature pages hereto hereby agrees to provide an Incremental Commitment in the amount set forth below such Lender's name on its respective signature page.

2. Conditions Precedent. This Incremental Joinder Agreement shall be effective on the Effective Date upon:

(a) receipt by the Administrative Agent of copies of this Incremental Joinder Agreement duly executed by the Borrower, the Administrative Agent, each Lender making or providing such Incremental Commitment, and each other Person (each, a "New Lender") making or providing such Incremental Commitment;

(b) receipt by the Administrative Agent of such documents and certifications as the Administrative Agent may reasonably require to evidence that each Loan Party is duly organized or formed, and is validly existing, in good standing and qualified to engage in business in its state of organization or formation;

(c) payment by the Borrower of any fees required to be paid on or before the Effective Date; and

(d) payment by the Borrower of all reasonable and documented fees, charges and disbursements of counsel to the Administrative Agent in connection with this Incremental Joinder Agreement (directly to such counsel if requested by the Administrative Agent).

3. Representations and Warranties of the Loan Parties. (a) The representations and warranties of each Loan Party contained in Article V of the Credit Agreement or any other Loan Document, or which are contained in any document furnished at any time under or in connection therewith, are true and correct in all material respects; and (b) no Default has occurred and is continuing or will exist immediately after giving effect to this Incremental Joinder Agreement.

4. Authority/Enforceability. The Borrower represents and warrants as follows:

(a) It has taken all necessary action to authorize the execution, delivery and performance of this Incremental Joinder Agreement.

(b) This Incremental Joinder Agreement has been duly executed and delivered by the Borrower and constitutes its legal, valid and binding obligations, enforceable in accordance with its terms, subject to applicable Debtor Relief Laws and to general principles of equity.

(c) No approval, consent, exemption, authorization, or other action by, or notice to, or filing with, any Governmental Authority or any other Person is necessary or required in connection with the execution, delivery or performance by the Borrower of this Incremental Joinder Agreement.

(d) The execution and delivery of this Incremental Joinder Agreement does not (i) contravene the terms of its Organization Documents or (ii) violate any Law.

5. New Lenders.

(a) Each New Lender (a) represents and warrants that (i) it has full power and authority, and has taken all action necessary, to execute and deliver this Incremental Joinder Agreement and to consummate the transactions contemplated hereby and to become a Lender under the Credit Agreement, (ii) it meets the requirements to be an assignee under Section 11.06(b)(v) of the Credit Agreement, (iii) it has received a copy of the Credit Agreement, and has received or has been accorded the opportunity to receive copies of the most recent financial statements delivered pursuant to Section 6.01 thereof, as applicable, and such other documents and information as it deems appropriate to make its own credit analysis and decision to enter into this Incremental Joinder Agreement, (iv) it has, independently and without reliance upon the Administrative Agent or any other Lender and based on such documents and information as it has deemed appropriate, made its own credit analysis and decision to enter into this Incremental Joinder Agreement, (v) if it is a Foreign Lender, attached hereto is any documentation required to be delivered by it pursuant to the terms of the Credit Agreement, duly completed and executed by such New Lender, and (vi) such New Lender is not and will not be (A) an employee benefit plan subject to Title I of ERISA, (B) a plan or account subject to Section 4975 of the Internal Revenue Code, (C) an entity deemed to hold "plan assets" of any such plans or accounts for purposes of ERISA or the Internal Revenue Code, or (D) a "governmental plan" within the meaning of ERISA.; and (b) agrees that (i) it will, independently and without reliance on the Administrative Agent or any other Lender, and based on such documents and information as it shall deem appropriate at the time, continue to make its own credit decisions in taking or not taking action under the Loan Documents, and (ii) it will perform in accordance with their terms all of the obligations which by the terms of the Loan Documents are required to be performed by it as a Lender.

(b) The Loan Parties agree that, as of the date hereof, such New Lender shall (i) be a party to the Credit Agreement and the other Loan Documents, (ii) be a "Lender" for all purposes of the Credit Agreement and the other Loan Documents, and (iii) have the rights and obligations of a Lender under the Credit Agreement and the other Loan Documents.

(c) The applicable address, facsimile number and electronic mail address of each New Lender for purposes of Section 11.02 of the Credit Agreement are as set forth in such New Lender's Administrative Questionnaire delivered by such New Lender to the Administrative Agent on or before the date hereof or to such other address, facsimile number and electronic mail address as shall be designated by such New Lender in a notice to the Administrative Agent.

6. Counterparts. This Incremental Joinder Agreement may be executed in any number of counterparts, each of which when so executed and delivered shall be an original, but all of which shall constitute one and the same instrument. Delivery of executed counterparts of this Incremental Joinder Agreement by facsimile or other secure electronic format (.pdf) shall be effective as an original.

7. GOVERNING LAW. THIS AGREEMENT AND ANY CLAIMS, CONTROVERSY, DISPUTE OR CAUSE OF ACTION (WHETHER IN CONTRACT OR TORT OR OTHERWISE) BASED UPON, ARISING OUT OF OR RELATING TO THIS AGREEMENT AND THE TRANSACTIONS CONTEMPLATED HEREBY SHALL BE GOVERNED BY, AND CONSTRUED IN ACCORDANCE WITH, THE LAW OF THE STATE OF NEW YORK.

8. Successors and Assigns. This Incremental Joinder Agreement shall be binding upon and inure to the benefit of the parties hereto and their respective successors and assigns.

9. Headings. The headings of the sections hereof are provided for convenience only and shall not in any way affect the meaning or construction of any provision of this Incremental Joinder Agreement.

10. Severability. If any provision of this Incremental Joinder Agreement is held to be illegal, invalid or unenforceable, (a) the legality, validity and enforceability of the remaining provisions of this Incremental Joinder Agreement shall not be affected or impaired thereby and (b) the parties shall endeavor in good faith negotiations to replace the illegal, invalid or unenforceable provisions with valid provisions the economic effect of which comes as close as possible to that of the illegal, invalid or unenforceable provisions. The invalidity of a provision in a particular jurisdiction shall not invalidate or render unenforceable such provision in any other jurisdiction.

[*signature pages follow*]

Each of the parties hereto has caused a counterpart of this Incremental Joinder Agreement to be duly executed and delivered as of the date first above written.

BORROWER: GREEN PLAINS OPERATING COMPANY LLC,
a Delaware limited liability company

By: /s/ Phil Boggs

Name: Phil Boggs

Title: Vice President, Finance and Treasurer

ADMINISTRATIVE
AGENT: BANK OF AMERICA, N.A.,
as Administrative Agent

By: /s/ Linda Lov
Name: Linda Lov
Title: Assistant Vice President

LENDERS: BANK OF AMERICA, N.A.,
as a Lender

By: /s/ Alok Jain
Name: Alok Jain
Title: Senior Vice President

Incremental Commitment: $20,000,000

NEW LENDERS: DEUSTCHE BANK AG NEW YORK BRANCH,
as a Lender

By: /s/ Shai Bandner
Name: Shai Bandner
Title: Director

By: /s/ Chris Chapman
Name: Chris Chapman
Title: Director

Incremental Commitment: $20,000,000

**Exhibit 31.1**

**CERTIFICATION OF CHIEF EXECUTIVE OFFICER**
**PURSUANT TO RULE 13a-14(a) AND SECTION 302 OF THE SARBANES-OXLEY ACT OF 2002**

I, Todd A. Becker, certify that:

1. I have reviewed this Quarterly Report on Form 10-Q of Green Plains 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 officer 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 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: November 2, 2017

*/s/ Todd A. Becker*
Todd A. Becker
*President and Chief Executive Officer*
*(Principal Executive Officer)*

**Exhibit 31.2**

**CERTIFICATION OF CHIEF FINANCIAL OFFICER**
**PURSUANT TO RULE 13a-14(a) AND SECTION 302 OF THE SARBANES-OXLEY ACT OF 2002**

I, John W. Neppl, certify that:

1. I have reviewed this Quarterly Report on Form 10-Q of Green Plains 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 officer 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 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: November 2, 2017

*/s/ John W. Neppl*
John W. Neppl
*Chief Financial Officer*
*(Principal Financial Officer)*

**Exhibit 32.1**

**CERTIFICATION OF CHIEF EXECUTIVE 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 Quarterly Report of Green Plains Inc. (the "company") on Form 10-Q for the fiscal quarter ended September 30, 2017 as filed with the Securities and Exchange Commission on the date hereof (the "Report"), I, Todd A. Becker, President and Chief Executive Officer of the company, certify, pursuant to 18 U.S.C. Section 1350, as adopted pursuant to Section 906 of the Sarbanes-Oxley Act of 2002, that to my knowledge:

1) The Report fully complies with the requirements of Sections 13(a) or 15(d) of the Securities Exchange Act of 1934; 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: November 2, 2017

*/s/ Todd A. Becker*
Todd A. Becker
*President and Chief Executive Officer*

**Exhibit 32.2**

**CERTIFICATION OF 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 Quarterly Report of Green Plains Inc. (the “company”) on Form 10-Q for the fiscal quarter ended September 30, 2017 as filed with the Securities and Exchange Commission on the date hereof (the “Report”), I, John W. Neppl, Chief Financial Officer of the company, certify, pursuant to 18 U.S.C. Section 1350, as adopted pursuant to Section 906 of the Sarbanes-Oxley Act of 2002, that to my knowledge:

1) The Report fully complies with the requirements of Sections 13(a) or 15(d) of the Securities Exchange Act of 1934; 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: November 2, 2017

*/s/ John W. Neppl*
John W. Neppl
*Chief Financial Officer*