TERRAVIA HOLDINGS, INC.

FORM 10-Q
(Quarterly Report)

Filed 08/08/16 for the Period Ending 06/30/16

Address	225 GATEWAY BLVD. S. SAN FRANCISCO, CA 94080
Telephone	650-780-4777
CIK	0001311230
Symbol	TVIA
SIC Code	2860 - Industrial Organic Chemicals
Industry	Oil & Gas Operations
Sector	Energy
Fiscal Year	12/31

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UNITED STATES
SECURITIES AND EXCHANGE COMMISSION

Washington, D.C. 20549

FORM 10-Q

(Mark One)

☒ **QUARTERLY REPORT PURSUANT TO SECTION 13 OR 15(d) OF THE SECURITIES EXCHANGE ACT OF 1934**

For the quarterly period ended June 30, 2016

OR

☐ **TRANSITION REPORT PURSUANT TO SECTION 13 OR 15(d) OF THE SECURITIES EXCHANGE ACT OF 1934**

For the Transition Period from _____to _____

Commission File Number: 001-35189

TerraVia Holdings, Inc.

(Exact name of Registrant as specified in its charter)

Delaware	**33-1077078**
(State or Other Jurisdiction of Incorporation or Organization)	**(I.R.S. Employer Identification Number)**

TerraVia Holdings, Inc.
225 Gateway Boulevard
South San Francisco, CA 94080
(650) 780-4777
(Address and telephone number principal executive offices)

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 pursuance 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, or a non-accelerated filer.

Large accelerated filer	☐	Accelerated filer	☒
Non-accelerated filer	☐	Smaller reporting company	☐

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

Indicate the number of shares outstanding of each of the issuer's classes of common stock, as of the latest practicable date

Class	**Outstanding at August 1, 2016**
Common Stock, $0.001 par value per share	85,219,925 shares

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PART I: FINANCIAL INFORMATION

Item 1. Financial Statements.

TERRAVIA HOLDINGS, INC.
CONDENSED CONSOLIDATED BALANCE SHEETS
In thousands, except share and per share amounts
Unaudited

	June 30, 2016	December 31, 2015
ASSETS		
Current assets:		
Cash and cash equivalents	$ 49,216	$ 46,966
Marketable securities available-for-sale	33,307	51,009
Accounts receivable, net	2,373	3,552
Unbilled revenues	610	1,036
Inventories	13,681	12,018
Prepaid expenses and other current assets	4,709	4,363
Total current assets	103,896	118,944
Property, plant and equipment, net	25,155	26,344
Investment in Solazyme Bunge JV	38,913	35,910
Other assets	1,177	774
Total assets	$ 169,141	$ 181,972
LIABILITIES, CONVERTIBLE PREFERRED STOCK AND STOCKHOLDERS' DEFICIT		
Current liabilities:		
Accounts payable	$ 6,752	$ 7,016
Accrued liabilities	9,393	14,155
Deferred revenue	5,665	4,159
Total current liabilities	21,810	25,330
Deferred revenue	—	500
Convertible debt	197,828	202,015
Other liabilities	1,359	602
Total liabilities	220,997	228,447
Commitments and contingencies (Note 15)		
Convertible preferred stock, par value $0.001—5,000,000 shares authorized; 27,850 and zero shares issued and outstanding at June 30, 2016 and December 31, 2015, respectively	26,732	—
Stockholders' deficit:		
Common stock, par value $0.001—225,000,000 and 150,000,000 shares authorized at June 30, 2016 and December 31, 2015, respectively; 84,705,844 and 81,734,078 shares issued and outstanding at June 30, 2016 and December 31, 2015, respectively	85	82
Additional paid-in capital	600,776	585,679
Accumulated other comprehensive loss	(15,594)	(22,331)
Accumulated deficit	(663,855)	(609,905)
Total stockholders' deficit	(78,588)	(46,475)
Total liabilities, convertible preferred stock and stockholders' deficit	$ 169,141	$ 181,972

See accompanying notes to the unaudited condensed consolidated financial statements.

TERRAVIA HOLDINGS, INC.
CONDENSED CONSOLIDATED STATEMENTS OF OPERATIONS
In thousands, except share and per share amounts
Unaudited

	Three Months Ended June 30,		Six Months Ended June 30,	
	2016	2015	2016	2015
Revenues:				
Product revenues	$ 6,355	$ 8,307	$ 13,627	$ 17,128
Research and development programs	3,592	3,433	7,179	7,217
Total revenues	9,947	11,740	20,806	24,345
Costs and operating expenses:				
Cost of product revenues	2,725	4,361	5,942	9,031
Research and development	8,276	12,747	16,507	25,301
Sales, general and administrative	16,000	20,981	32,768	42,249
Restructuring charges	49	(31)	1,239	393
Total costs and operating expenses	27,050	38,058	56,456	76,974
Loss from operations	(17,103)	(26,318)	(35,650)	(52,629)
Other income (expense):				
Interest and other income, net	286	137	600	400
Interest expense	(3,478)	(3,547)	(6,967)	(7,083)
Debt conversion expense	(1,785)	—	(1,785)	—
Loss from equity method investment	(5,358)	(7,309)	(10,230)	(12,375)
Change in fair value of derivative liabilities	—	(134)	82	(149)
Total other expense, net	(10,335)	(10,853)	(18,300)	(19,207)
Net loss	$ (27,438)	$ (37,171)	$ (53,950)	$ (71,836)
Net loss per share, basic and diluted	(0.33)	(0.46)	(0.65)	(0.90)
Weighted average number of common shares used in loss per share computation, basic and diluted	84,379,863	80,097,866	83,164,890	79,874,952

See accompanying notes to the unaudited condensed consolidated financial statements.

TERRAVIA HOLDINGS, INC.
CONDENSED CONSOLIDATED STATEMENTS OF COMPREHENSIVE LOSS
In thousands
Unaudited

	Three Months Ended June 30,		Six Months Ended June 30,	
	2016	2015	2016	2015
Net loss	$ (27,438)	$ (37,171)	$ (53,950)	$ (71,836)
Other comprehensive income (loss), net:				
Change in unrealized gain/loss on available-for-sale securities	11	15	15	190
Foreign currency translation adjustment	3,637	1,942	6,722	(4,255)
Other comprehensive income (loss)	3,648	1,957	6,737	(4,065)
Total comprehensive loss	$ (23,790)	$ (35,214)	$ (47,213)	$ (75,901)

See accompanying notes to the unaudited condensed consolidated financial statements.

TERRAVIA HOLDINGS, INC.
CONDENSED CONSOLIDATED STATEMENTS OF CASH FLOWS
In thousands
Unaudited

	Six Months Ended June 30,	
	2016	**2015**
Operating activities:		
Net loss	$ (53,950)	$ (71,836)
Adjustments to reconcile net loss to net cash used in operating activities:		
Depreciation and amortization	2,375	2,861
Net amortization of premiums on marketable securities	101	702
Amortization of debt discount and loan fees	1,307	1,256
Debt conversion expense	1,785	—
Warrant expense related to vesting of ADM Warrant	—	51
Provision for doubtful accounts	321	—
Non-cash restructuring charges	—	393
Stock-based compensation expense	5,821	8,788
Loss from equity method investment	10,230	11,980
Change in fair value of derivative liabilities	(82)	149
Changes in operating assets and liabilities:		
Accounts receivable	(1,030)	(2,387)
Unbilled revenues	426	1,817
Inventories	(1,663)	544
Prepaid expenses and other assets	(693)	77
Accounts payable	(194)	(3,447)
Accrued liabilities	(3,387)	(2,926)
Deferred revenue	1,006	(375)
Other current and long-term liabilities	757	3,327
Net cash used in operating activities	(36,870)	(49,026)
Investing activities:		
Purchases of property, plant and equipment	(1,259)	(703)
Proceeds from the sale of equipment	—	121
Purchases of marketable securities	(1,621)	(19,250)
Maturities of marketable securities	16,378	69,506
Proceeds from sales of marketable securities	3,016	2,425
Capital contributions to Solazyme Bunge JV	(4,955)	(10,287)
Restricted certificates of deposit	—	181
Net cash provided by investing activities	11,559	41,993
Financing activities:		
Proceeds from the issuance of common stock	325	427
Proceeds from issuance of preferred stock, net of offering costs	27,067	—
Other	—	(38)
Net cash provided by financing activities	27,392	389
Effect of exchange rate changes on cash and cash equivalents	169	(392)
Net increase in cash and cash equivalents	2,250	(7,036)
Cash and cash equivalents — beginning of period	46,966	42,689
Cash and cash equivalents — end of period	$ 49,216	$ 35,653
Supplemental disclosures of cash flow information:		
Interest paid in cash, net of capitalized interest	$ 5,587	$ 5,585
Non-cash financing activity:		
Non-cash issuance of common stock options for offering costs	$ 335	$ —
Issuance of common stock to settle restructuring liabilities	$ 1,205	$ —
Exchange of convertible debt for common stock pursuant to inducement:		
Convertible debt exchanged	$ 5,598	$ —
Issuance of common stock	$ 7,231	$ —

See accompanying notes to the unaudited condensed consolidated financial statements.

TERRAVIA HOLDINGS, INC.
NOTES TO THE UNAUDITED CONDENSED CONSOLIDATED FINANCIAL STATEMENTS

1. THE COMPANY

Nature of Business —TerraVia Holdings, Inc. (the "Company") was incorporated in the State of Delaware on March 31, 2003. The Company creates food, nutrition and specialty ingredients from algae. In May 2016, the Company changed its name from "Solazyme, Inc." to "TerraVia Holdings, Inc.", and changed its Nasdaq ticker listing from SZYM to TVIA.

The Company's proprietary technology uses microalgae to produce high-value triglyceride oils, proteins, fibers, micronutrients and other ingredients. The Company has developed and is commercializing products for food and nutrition ingredients, animal nutrition ingredients and specialty skin and personal care applications and its products can replace or enhance products derived from the world's three existing oil sources: petroleum, plants and animal fats. The Company's technology platform harnesses the oil, protein and polysaccharide-producing characteristics of microalgae and the Company is able to tailor the composition of its oils, powders and other bioproducts to address specific customer requirements. The Company uses standard fermentation equipment to convert sugars into the desired end product. By feeding plant-based sugars to the Company's proprietary microalgae in enclosed fermentation tanks, the Company is in effect utilizing "indirect photosynthesis."

The Company is involved in a highly competitive industry that is characterized by the risks of changing technologies, market conditions and regulatory requirements. Penetration into markets requires investment of considerable resources and continuous development efforts. The Company's future success depends upon several factors, including the technological quality, price, and performance of its products and services relative to those of its competitors, scaling up of production for commercial sale, ability to secure adequate project financing at appropriate terms, and the nature of regulation in its target markets.

Liquidity —The Company has incurred substantial net losses since its inception; the Company incurred net losses of $54.0 million and $71.8 million during the six months ended June 30, 2016 and 2015, respectively. Accumulated deficit was $663.9 million as of June 30, 2016 . Net cash used in operating activities was $36.9 million and $49.0 million during the six months ended June 30, 2016 and 2015, respectively. Cash and cash equivalents and marketable securities available for sale were $82.5 million as of June 30, 2016 .

The Company is an emerging growth company with a limited operating history. The Company only recently began commercializing many of its products. To date, a substantial portion of revenues has consisted of funding from third party collaborative research agreements and government grants. The Company has generated limited revenues from commercial sales, principally derived from sales of skin and personal care products. A significant portion of future revenues are expected to come from commercial sales in the food and nutrition ingredients and specialty skin and personal care products.

Net losses may continue as the Company ramps up manufacturing capacity and builds out its product pipeline. The Company expects to incur additional costs and expenses related to the continued development and expansion of its business, including research and development, the operation of its commercial production facility in Peoria, Illinois ("Peoria Facility"), the ramp up and operation of the commercial production facility in Brazil ("Solazyme Bunge JV") through its joint venture with Bunge Global Innovation, LLC (together with its affiliates, "Bunge") and other commercial facilities.

The Company, along with its development and commercialization partners, needs to develop products successfully, cost effectively produce them in large quantities and market and sell such products profitably. The Company's failure to generate sufficient revenues, achieve planned gross margins, control operating costs or raise sufficient additional funds may require it to modify, delay or abandon its planned operations, which could have a material adverse effect on the business, operating results, financial condition and ability to achieve intended business objectives. The Company may be required to seek additional funds through collaborations, public or private debt or equity financings or government programs, and may also seek to reduce expenses related to the Company's operations. In March 2016, the Company issued 27,850 shares of Convertible Preferred Stock for cash proceeds of $27.1 million , net of associated cash costs (see Note 17). There can be no assurance that any additional financing will be available or on acceptable terms.

2. SUMMARY OF SIGNIFICANT ACCOUNTING POLICIES AND RECENT ACCOUNTING PRONOUNCEMENTS

Basis of Presentation - The accompanying unaudited interim condensed consolidated financial statements have been prepared in accordance with accounting principles generally accepted in the United States of America ("GAAP") and include all adjustments necessary for the fair presentation of the Company's condensed consolidated financial position, results of

operations and cash flows for the periods presented. The unaudited interim condensed consolidated financial statements include the accounts of the Company and its wholly-owned subsidiaries, Solazyme Brazil Renewable Oils and Bioproducts Limitada (“Solazyme Brazil”) and Solazyme Manufacturing 1, L.L.C., the latter of which owns the Company's facility located in Peoria, Illinois ("Peoria Facility"). All intercompany accounts and transactions have been eliminated in consolidation.

T he Solazyme Bunge JV is a variable interest entity ("VIE") that is 50.1% owned by the Company and 49.9% owned by Bunge. The Company determined that it was not required to consolidate the 50.1% ownership in this joint venture and, therefore, accounts for this joint venture under the equity method of accounting (see Note 11).

The unaudited interim condensed consolidated financial statements have been prepared on the same basis as the audited consolidated financial statements and, in the opinion of management, reflect all adjustments of a normal recurring nature considered necessary to present fairly the Company’s interim financial information. The results of operations for the three and six months ended June 30, 2016 are not necessarily indicative of the results that may be expected for the year ending December 31, 2016, or for other interim periods or future years.

These unaudited interim condensed consolidated financial statements should be read in conjunction with the consolidated financial statements and notes thereto included in our Annual Report on Form 10-K for the year ended December 31, 2015, as filed with the United States Securities and Exchange Commission (“SEC”) on March 15, 2016. The December 31, 2015 unaudited interim condensed consolidated balance sheet included herein was derived from the audited consolidated financial statements as of that date, but does not include all disclosures, including notes required by GAAP for complete financial statements.

Significant Accounting Policies – There have been no changes to the Company’s significant accounting policies since the Company’s Annual Report on Form 10-K for the year ended December 31, 2015.

Recently Adopted Accounting Standards — In April 2015, the FASB issued ASU 2015-03, *Simplifying the Presentation of Debt Issuance Costs* . The standard amends existing guidance to require the presentation of debt issuance costs in the balance sheet as a deduction from the carrying amount of the related debt liability instead of as an asset. The Company adopted ASU 2015-03 retrospectively in its fiscal quarter ended March 31, 2016. As a result of the retrospective adoption, the Company reclassified unamortized debt issuance costs of $0.5 million from other long-term assets to a reduction in convertible debt on the condensed consolidated balance sheet as of December 31, 2015.

Recent Accounting Pronouncements —In May 2014, the FASB issued Accounting Standards Update ("ASU") 2014-09, *Revenue from Contracts with Customers (Topic 606)* (“ASU 2014-09”), which supersedes the revenue recognition requirements in FASB ASC 605, *Revenue Recognition* . ASU 2014-09 is based on the principle that revenue is recognized to depict the transfer of goods or services to customers in an amount that reflects the consideration to which the entity expects to be entitled in exchange for those goods or services. ASU 2014-09 also requires additional disclosure about the nature, amount, timing and uncertainty of revenue and cash flows arising from customer contracts, including significant judgments and changes in judgments and assets recognized from costs incurred to obtain or fulfill a contract. In addition, in March and April 2016, the FASB issued ASU No. 2016-08, *Revenue from Contracts with Customers (Topic 606)* and ASU No. 2016-10, *Revenue from Contracts with Customers (Topic 606),* which clarify the guidance in ASU 2014-09 and have the same effective date as the original standard. This guidance requires the recognition of revenue to depict the transfer of promised goods or services to customers in an amount that reflects the consideration expected in exchange for those goods or services. In May 2016, the FASB issued ASU No. 2016-12, *Narrow Scope Improvements and Practical Expedients* (“ASU 2016-12”), which provides for improvements to the guidance on collectability, noncash consideration and completed contracts, and provides a practical expedient for contract modifications upon adoption of the updated guidance under ASC 606. This new guidance is effective for interim and annual reporting periods beginning after December 15, 2017, and early adoption is permitted, but not before December 15, 2016, and are required to be adopted by taking either a full retrospective or a modified retrospective approach. The Company is currently assessing the potential impact of this new guidance on its consolidated financial statements.

In February 2016, the FASB issued ASU 2016-02, *Leases (Topic 842)* which, for operating leases, requires a lessee to recognize a right-of-use asset and a lease liability, initially measured at the present value of the lease payments, in its balance sheet. The standard also requires a lessee to recognize a single lease cost, calculated so that the cost of the lease is allocated over the lease term, on a generally straight-line basis. The ASU is effective for public companies for fiscal years beginning after December 15, 2018, including interim periods within those fiscal years. Early adoption is permitted. The Company is in the process of evaluating the impact of the adoption of this new guidance on its consolidated financial statements.

In March 2016, the FASB issued ASU 2016-09, Compensation, Stoc *k Compensation (Topic 718)* , a new standard simplifying certain aspects of accounting for share-based payments. The key provision of the new standard requires that excess tax benefits and shortfalls be recorded as income tax benefit or expense in the income statement, rather than in equity. The ASU is effective

for public companies for fiscal years beginning after December 15, 2016, including interim periods within those fiscal years. Early adoption is permitted. The Company is in the process of evaluating the impact of the adoption of this new guidance on its consolidated financial statements.

3. BASIC AND DILUTED NET LOSS PER SHARE

Basic net loss per share is computed by dividing the Company's net loss by the weighted-average number of common shares outstanding during the period. Diluted net loss per share is computed by giving effect to all potentially dilutive securities, including stock options, common stock issuable pursuant to the 2011 Employee Stock Purchase Plan, restricted stock, restricted stock units and common stock warrants. Basic and diluted net loss per share was the same for all periods presented as the inclusion of all potentially dilutive securities outstanding was anti-dilutive.

The following outstanding shares of potentially dilutive securities were excluded from the calculation of diluted net loss per share for the three and six months ended June 30, 2016 and 2015, as their effect was anti-dilutive:

	June 30,	
	2016	2015
Options to purchase common stock	12,407,862	10,603,967
Restricted stock units	1,558,534	1,791,457
Warrants to purchase common stock	750,000	1,250,000
Shares of common stock to be issued upon conversion of Series A Preferred Stock	13,925,000	—
Shares of common stock to be issued upon conversion of convertible debt ("Notes")	18,177,681	18,790,996
Total	46,819,077	32,436,420

The table above does not reflect early conversion payment features of the Notes (see Notes 8 and 14) that may be settled, at the Company's election, in cash or, subject to satisfaction of certain conditions, in shares of the Company's common stock.

4. CHANGES IN ACCUMULATED OTHER COMPREHENSIVE LOSS

Changes in accumulated other comprehensive loss, by component, are as follows (in thousands):

	Foreign Currency Translation Adjustments	Change in Unrealized Gain/(Loss) on Available-For-Sale Securities	Total Accumulated Other Comprehensive Loss
Balance at December 31, 2015	$ (22,333)	$ 2	$ (22,331)
Other comprehensive income	6,722	15	6,737
Balance at June 30, 2016	$ (15,611)	$ 17	$ (15,594)

5. SEGMENT INFORMATION

The Company has two operating segments for financial statement reporting purposes: Algenist ® and Ingredients & Other. The Company's chief operating decision maker reviews and monitors gross margin by segment, however, the Company does not allocate its operating expenses between its different segments and its collaborative research and development programs, and therefore, the chief operating decision maker does not evaluate financial performance beyond product gross margin. The Company does not allocate its assets to its reportable segments. As further described in Note 18, on August 2, 2016 the Company entered into a definitive agreement to sell a majority interest in Algenist® to Tengram Capital Partners.

The following table shows gross margin for the Company's reportable segments for the three and six months ended June 30, 2016 and 2015, reconciled to the Company's total product revenue and cost of product revenue as shown in its condensed consolidated statements of operations (in thousands):

Three months ended June 30, 2016	Algenist ®	Ingredients & Other	Total
Product revenues	$ 5,499	$ 856	$ 6,355
Cost of product revenues	1,865	860	2,725
Segment gross margin (loss)	$ 3,634	$ (4)	$ 3,630
Six Months Ended June 30, 2016	**Algenist ®**	**Ingredients & Other**	**Total**
Product revenues	$ 11,470	$ 2,157	$ 13,627
Cost of product revenues	3,788	2,154	5,942
Segment gross margin	$ 7,682	$ 3	$ 7,685
Three months ended June 30, 2015			
Product revenues	$ 5,191	$ 3,116	$ 8,307
Cost of product revenues	1,347	3,014	4,361
Segment gross margin	$ 3,844	$ 102	$ 3,946
Six Months Ended June 30, 2015			
Product revenues	$ 11,402	$ 5,726	$ 17,128
Cost of product revenues	3,667	5,364	9,031
Segment gross margin	$ 7,735	$ 362	$ 8,097

A reconciliation of total segment gross margin to operating loss is as follows:

	Three Months Ended June 30,		Six Months Ended June 30,	
	2016	2015	2016	2015
Gross margin	$ 3,630	$ 3,946	$ 7,685	$ 8,097
Research and development programs revenue	3,592	3,433	7,179	7,217
Research and development expense	(8,276)	(12,747)	(16,507)	(25,301)
Sales, general and administrative expense	(16,000)	(20,981)	(32,768)	(42,249)
Restructuring charges	(49)	31	(1,239)	(393)
Loss from operations	$ (17,103)	$ (26,318)	$ (35,650)	$ (52,629)

6. RESTRUCTURING CHARGES

In October 2015, the Company made a strategic decision to terminate its manufacturing agreements at the ADM Clinton and American Natural Processors ("ANP") Galva facilities to better align the Company's immediate production assets with its operating strategy while minimizing production costs. As part of the Company's continuing strategy to focus its operations on targeted, higher-value product categories, the Company streamlined operations by reducing workforce by approximately 20% in January 2016. Restructuring activities for the six months ended June 30, 2016 were as follows (in thousands):

	Liability as of December 31, 2015	2016 Expense	Deductions/Payments	Liability as of June 30, 2016
Other exit costs	$ 3,400	$ 57	$ (3,157)	$ 300
Employee termination costs	—	1,182	(971)	211
Total	$ 3,400	$ 1,239	$ (4,128)	$ 511

7. MARKETABLE SECURITIES AVAILABLE-FOR-SALE

Marketable securities classified as available-for-sale consisted of the following (in thousands):

	June 30, 2016			
	Amortized Cost	Gross Unrealized Gain	Gross Unrealized Loss	Fair Value
Corporate bonds	$ 18,486	$ 15	$ (10)	$ 18,491
Asset-backed securities	6,247	1	(7)	6,241
Government and agency securities	4,016	17	—	4,033
Mortgage-backed securities	3,352	11	(14)	3,349
Municipal bonds	1,190	3	—	1,193
Total	$ 33,291	$ 47	$ (31)	$ 33,307

	December 31, 2015			
	Amortized Cost	Gross Unrealized Gain	Gross Unrealized Loss	Fair Value
Corporate bonds	$ 25,608	$ 122	$ (73)	$ 25,657
Asset-backed securities	12,424	—	(31)	12,393
Mortgage-backed securities	4,800	2	(23)	4,779
Government and agency securities	5,705	16	(9)	5,712
Municipal bonds	2,470	—	(2)	2,468
Total	$ 51,007	$ 140	$ (138)	$ 51,009

The following table summarizes the amortized cost and fair value of the Company's marketable securities, classified by maturity as of June 30, 2016 and December 31, 2015 (in thousands):

	June 30, 2016		December 31, 2015	
	Amortized Cost	Fair Value	Amortized Cost	Fair Value
Marketable securities				
Due in 1 year or less	$ 19,556	$ 19,566	$ 17,783	$ 17,870
Due in 1-2 years	6,626	6,640	15,900	15,858
Due in 2-3 years	2,973	2,971	7,959	7,934
Due in 3-4 years	808	807	2,399	2,408
Due in 4-9 years	1,113	1,116	2,844	2,843
Due in 9-20 years	1,042	1,038	1,397	1,394
Due in 20-35 years	1,173	1,169	2,725	2,702
	$ 33,291	$ 33,307	$ 51,007	$ 51,009

Marketable securities classified as available-for-sale are carried at fair value as of June 30, 2016 and December 31, 2015 . Realized gains and losses from sales and maturities of marketable securities were not significant in the periods presented.

The aggregate fair value of available-for-sale securities with unrealized losses was $14.7 million as of June 30, 2016 . Gross unrealized losses on available-for-sale securities were $31,000 as of June 30, 2016 , and the Company believes the gross unrealized losses are temporary. In determining that the decline in fair value of these securities was temporary, the Company considered the length of time each security was in an unrealized loss position and the extent to which the fair value was less than cost. The Company had $2.0 million of available-for-sale securities which had been in a continuous loss position for more than 12 months as of June 30, 2016 . In addition, the Company intends to hold these securities. Hence it is not more likely than not that the Company will be required to sell these securities before the recovery of their amortized cost basis.

8. FAIR VALUE OF FINANCIAL INSTRUMENTS

Assets and liabilities recorded at fair value in the consolidated financial statements are categorized based upon the level of judgment associated with the inputs used to measure their fair value. Hierarchical levels that are directly related to the amount of subjectivity associated with the inputs to the valuation of these assets or liabilities are as follows:

- Level 1—Observable inputs, such as quoted prices in active markets for identical assets or liabilities.
- Level 2—Observable inputs other than Level 1 prices, such as quoted prices for similar assets or liabilities, quoted prices in markets that are not active, or other inputs that are observable or can be corroborated by observable market data for substantially the full term of the assets or liabilities.
- Level 3—Unobservable inputs that are supported by little or no market activity and that are significant to the fair value of the assets or liabilities. Level 3 assets and liabilities include those whose fair value measurements are determined using pricing models, discounted cash flow methodologies or similar valuation techniques and significant management judgment or estimation.

The following tables present the Company's financial instruments that were measured at fair value on a recurring basis as of June 30, 2016 and December 31, 2015 by level within the fair value hierarchy (in thousands):

	June 30, 2016			
	Level 1	Level 2	Level 3	Total
Financial Assets				
Cash equivalents	$ 4	$ 5,287	$ —	$ 5,291
Marketable securities:				
Corporate bonds	—	18,491	—	18,491
Asset-backed securities	—	6,241	—	6,241
Government and agency securities	2,481	1,552	—	4,033
Mortgage-backed securities	—	3,349	—	3,349
Municipal bonds	—	1,193	—	1,193
	2,481	30,826	—	33,307
Total	$ 2,485	$ 36,113	$ —	$ 38,598
Financial Liabilities				
Fair value of early conversion feature of convertible debt	$ —	$ —	$ —	$ —

	December 31, 2015			
	Level 1	Level 2	Level 3	Total
Financial Assets				
Cash equivalents	$ 3	$ 18,900	$ —	$ 18,903
Marketable securities:				
Corporate bonds	—	25,657	—	25,657
Asset-backed securities	—	12,393	—	12,393
Mortgage-backed securities	—	4,779	—	4,779
Government and agency securities	3,722	1,990	—	5,712
Municipal bonds	—	2,468	—	2,468
	3,722	47,287	—	51,009
Total	$ 3,725	$ 66,187	$ —	$ 69,912
Financial Liabilities				
Fair value of early conversion feature of convertible debt	$ —	$ —	$ 82	$ 82

Cash Equivalents and Marketable Securities – Cash equivalents and marketable securities classified within Level 2 of the fair value hierarchy are valued based on other observable inputs, including broker or dealer quotations or alternative pricing sources. When quoted prices in active markets for identical assets or liabilities are not available, the Company relies on non-binding quotes, which are based on proprietary valuation models of independent pricing services. These models generally use inputs such as observable market data, quoted market prices for similar instruments, historical pricing trends of a security as

relative to its peers and internal assumptions of the independent pricing services. The Company corroborates the reasonableness of non-binding quotes received from the independent pricing services by comparing them to quotes of identical or similar instruments from other pricing sources. During the three and six months ended June 30, 2016 and 2015 , the Company did not record impairment charges related to its cash equivalents and marketable securities, and the Company did not have any transfers between Level 1, Level 2 and Level 3 of the fair value hierarchy.

As of June 30, 2016 and December 31, 2015, the carrying values of the Company's accounts receivables and secured and unsecured debt obligations, excluding the Notes, approximated their fair values. The Company has estimated the fair value of the Notes to be $107.0 million at June 30, 2016 , compared to a carrying value of $197.8 million . These estimates are based upon Level 2 inputs using the market price of the Notes derived from actual trades quoted from Bloomberg using a midmarket pricing convention (the midpoint price between bid and ask prices).

9. INVENTORIES

Inventories consisted of the following (in thousands):

	June 30, 2016	December 31, 2015
Raw materials	$ 2,738	$ 1,837
Work in process	5,524	6,621
Finished goods	5,419	3,560
Total inventories	$ 13,681	$ 12,018

10. PROPERTY, PLANT AND EQUIPMENT—NET

Property, plant and equipment—net consisted of the following (in thousands):

	June 30, 2016	December 31, 2015
Plant equipment	$ 25,093	$ 24,824
Building and improvements	5,811	5,810
Lab equipment	7,466	7,495
Leasehold improvements	2,599	1,876
Computer equipment and software	4,300	4,159
Furniture and fixtures	634	669
Land	430	430
Automobiles	194	194
Construction in progress	206	342
Total	46,733	45,799
Less: accumulated depreciation and amortization	(21,578)	(19,455)
Property, plant and equipment—net	$ 25,155	$ 26,344

Depreciation and amortization expense was $1.2 million and $2.4 million and for the three and six months ended June 30, 2016 , and was $1.4 million and $2.9 million for the three and six months ended June 30, 2015 , respectively.

11. INVESTMENT IN SOLAZYME BUNGE JOINT VENTURE

Background and Operations

In April 2012, the Company and Bunge formed the Solazyme Bunge JV to build, own and operate the Solazyme Bunge JV Plant, a commercial-scale renewable algae oils production facility adjacent to Bunge's Moema sugarcane mill in Brazil, leveraging the Company's technology. The Solazyme Bunge JV is 50.1% owned by the Company and 49.9% % owned by Bunge and is governed by a six member board of directors, three from each investor.

The Solazyme Bunge JV's operational focus from inception to date was primarily on supporting the construction, ramp up and optimization of the commercial-scale production facility. While the Solazyme Bunge JV has incurred significant losses to date, the Company believes that the overall long-term expectation of profitability will drive positive cash flows sufficient for the Company to recover its investment in the Solazyme Bunge JV.

In October 2015, the Company and Bunge entered into an amended and restated joint venture agreement to expand the Solazyme Bunge JV to add a worldwide focus on human food and animal nutrition. Also in October 2015, the Company and Bunge entered into an amended and restated Development Agreement under which the Company granted to the Solazyme Bunge JV a worldwide royalty-bearing, field-limited license to all of its technology that is necessary or useful for the manufacture of certain algae oil products. Concurrently with the entry into such agreements, the Company and Solazyme Bunge JV entered into two funded research programs targeted at completing the development of additional products for the Solazyme Bunge JV; pursuant to these agreements:

Solazyme Bunge JV will:

- continue to use the Company's proprietary technology to produce a range of algae-based oils and products from cane sugar through microbe-based catalysis;
- pay the Company a royalty for certain products sold by the joint venture; and
- pay the Company a technology maintenance fee in recognition of the Company's ongoing research investment in technology.

The Company will:

- provide sales, marketing and application development for certain oils and technical expertise in regard to the implementation of its technology;
- provide access to the Company's proprietary technology for the production of certain oils and structuring fats for the food and animal nutrition markets; and
- retain co-primary sales rights for certain products.

Bunge will:

- continue to provide cane sugar feedstock and utilities to the Solazyme Bunge JV Plant from Bunge's adjacent sugar cane processing mill;
- provide sales, marketing and application development for certain food oils and will also provide oil processing, global distribution and logistics;
- serve as the primary sales channel for some of the joint venture's products, with the Company as an additional sales channel, in each case in exchange for a distribution fee; and
- continue to provide working capital to the Solazyme Bunge JV through a revolving loan facility.

The Company contributed $5.0 million and $10.3 million in the six months ended June 30, 2016 and 2015 , respectively. The Company also contributed $1.9 million and $3.8 million in the six months ended June 30, 2016 and 2015 , respectively, to the Solazyme Bunge JV through a reduction in the Company’s receivables due from the Solazyme Bunge JV.

Equity Accounting

The Company accounts for its interest in the Solazyme Bunge JV under the equity method of accounting. The Company's equity investment in the Solazyme Bunge JV was $38.9 million and $35.9 million as of June 30, 2016 and December 31, 2015, respectively. During the six months ended June 30, 2016 and 2015, the Company recognized $10.2 million and $12.4 million of losses, respectively, related to its equity method investment in the Solazyme Bunge JV.

The Company has determined that the Solazyme Bunge JV is a VIE based on the insufficiency of each party’s equity investment at risk to absorb losses and the Company’s share of the respective expected losses of the Solazyme Bunge JV. The optimization and ramping up of the Solazyme Bunge JV Plant is the activity of the Solazyme Bunge JV that most significantly impacts its current economic performance. Although the Company has the obligation to absorb losses and the right to receive benefits of the Solazyme Bunge JV that could potentially be significant to the Solazyme Bunge JV, each of the Company and

Bunge has equally shared decision–making powers over certain significant activities of the Solazyme Bunge JV, including those related to the construction, optimization and ramping up of the Solazyme Bunge JV. Therefore, as of June 30, 2016 , the Company does not consider itself to be the Solazyme Bunge JV's primary beneficiary, and as such has not consolidated the financial results of the Solazyme Bunge JV. Consolidation may be required in the future due to changes in events and circumstances impacting the power to direct the activities that most significantly affect the Solazyme Bunge JV's economic performance. The Company will continue to reassess its potential designation as the primary beneficiary of the Solazyme Bunge JV.

The following table summarizes the carrying amounts of the assets and liabilities included in the Company's consolidated balance sheets and the maximum loss exposure related to the Company's interest in the Solazyme Bunge JV as of June 30, 2016 and December 31, 2015 (in thousands):

	As of June 30, 2016				
	Assets			Liabilities	
	Accounts Receivable	Unbilled Revenues	Investments in Unconsolidated Joint Ventures	Loan Guarantee	Maximum Exposure to Loss [1]
Solazyme Bunge JV	$ 12	$ 563	$ 38,913	$ —	$ 51,029

	As of December 31, 2015				
	Assets			Liabilities	
	Accounts Receivable	Unbilled Revenues	Investments in Unconsolidated Joint Ventures	Loan Guarantee	Maximum Exposure to Loss [2]
Solazyme Bunge JV	$ 12	$ 839	$ 35,910	$ —	$ 45,692

[1] Includes maximum exposure to loss attributable to the Company's bank guarantee required to be provided for the Solazyme Bunge JV of $10.9 million and non-cancelable purchase obligations of $0.6 million (based on the exchange rate at June 30, 2016).
[2] Includes maximum exposure to loss attributable to the Company's bank guarantee required to be provided for the Solazyme Bunge JV of $8.9 million (based on the exchange rate at December 31, 2015).

The Company may be required to contribute additional capital to the Solazyme Bunge JV which would increase the Company's maximum exposure to loss. These future contribution amounts cannot be quantified at this time.

Summarized Financial Information

Summarized information on the Solazyme Bunge JV's balance sheets and income statements as of June 30, 2016 and December 31, 2015, and for the three and six months ended June 30, 2016 and 2015 respectively, was as follows (in thousands):

	As of June 30, 2016	As of December 31, 2015
Current assets	$ 8,132	$ 5,654
Property, plant and equipment, net	121,495	100,755
Recoverable taxes [1]	19,962	16,144
Total assets	$ 149,589	$ 122,553
Current liabilities	$ 34,877	$ 23,009
Noncurrent liabilities	46,425	43,054
JV's partners' capital, net	68,287	56,490
Total liabilities and partners' capital, net	$ 149,589	$ 122,553

[1] Recoverable taxes are comprised of value-added taxes paid upon the acquisition of property, plant and equipment items and other goods and services, and other transactional taxes which can be recovered in cash or as compensation against income taxes or other taxes owed by

Solazyme Bunge JV in Brazil. The realization of these recoverable tax payments could take in excess of five years.

	Three months ended June 30,		Six Months Ended June 30,	
	2016	2015	2016	2015
Net sales	$ 1,937	$ 401	$ 2,996	$ 658
Net losses	$ (10,325)	$ (13,407)	$ (19,679)	$ (23,175)

During 2013, the Solazyme Bunge JV entered into a loan agreement with the Brazilian Development Bank ("BNDES" or "BNDES Loan") under which it could borrow up to $76.0 million (based on the exchange rate as of June 30, 2016). Outstanding borrowings were $59.2 million and $53.4 million as of June 30, 2016 and December 31, 2015, respectively. The Company has provided a bank guarantee equal to 14.39% of the total amount available under the BNDES Loan and may be required to provide a corporate guarantee equal to 35.71% of the total amount available under the BNDES Loan (with the total amount covered by the guarantees not to exceed the Company's ownership percentage in the Solazyme Bunge JV). The BNDES funding has supported the construction of the Solazyme Bunge JV's production facility. The term of the BNDES Loan is eight years and the loan has an average interest rate of approximately 4.0% per annum. As of June 30, 2016 , the Company's bank guarantee was in place and the corporate guarantee was not in place. The fees incurred on the cancelable bank guarantee were not material during the three and six months ended June 30, 2016 and 2015.

Impairment Assessment

The Company assessed the recoverability of its equity investment in Solazyme Bunge JV as of December 31, 2015 using a discounted cash flow analysis. Based upon such analysis, the Company expects to recover the carrying amount of its equity investment and concluded that its equity investment was not impaired. The Company is not aware of any events since that assessment was done that would indicate its equity investment was impaired as of June 30, 2016.

The process of evaluating the potential impairment is subjective and requires significant estimates and assumptions. The Company's estimated future cash flows are based on assumptions that are consistent with its annual planning process and include estimates for revenue and operating margins and future economic and market conditions. Actual future results may differ significantly from those estimates. Changes in assumptions or circumstances could result in an impairment in the period the change occurs and in future years. Management's conclusion that its equity investment was not impaired as of December 31, 2015 was based upon the following critical estimates and assumptions:

- No significant adverse change in the regulatory or economic environment in Brazil or other countries, as applicable
- No significant difficulties as production increases from minimal capacity to full capacity over the next several years
- Sales mix of products currently commercially produced and sold to existing customers as well as certain oil products for food and animal nutrition markets under development and expected to be commercialized in 2016 and 2017
- Average selling prices based on current contracted prices and at or above market prices for comparable products
- Additional capital investment to increase plant capacity for new products and process improvements of approximately $50 million in total
- Increased fermentation and recovery efficiencies over the next 5 years based on strain and process improvements
- Reduction to production costs based on ramp up of production volume to an aggregate maximum plant capacity in line with sales volume
- Discount rate of approximately 14%

In order for the Solazyme Bunge JV to achieve sufficient cash flows to enable the Company to fully recover its equity investment, the Solazyme Bunge JV must:

- Increase production volumes by:
  - Optimizing plant throughput
  - Improving lipid and oil content output
  - Increasing final recovery yields
- Maintain access to low-cost cane sugar feedstock and power
- Commercialize and sell its high value products

The estimates used for cash flow forecasts required significant exercise of judgment and are subject to change in future reporting periods as facts and circumstances change. Additionally, the Company may make changes to its business plan that could result in changes to the expected cash flows. As a result, it is possible that impairments may be required in future reporting periods.

12. ACCRUED LIABILITIES

Accrued liabilities consisted of the following (in thousands):

	June 30, 2016	December 31, 2015
Accrued compensation and related liabilities	$ 4,693	$ 6,270
Accrued interest	3,287	3,495
Accrued restructuring costs	511	3,400
Other accrued liabilities	902	990
Total accrued liabilities	$ 9,393	$ 14,155

13. COLLABORATIVE RESEARCH AND DEVELOPMENT AGREEMENTS, DISTRIBUTION AGREEMENTS, AND LICENSES

Unilever —The Company has entered into multiple joint research and development agreements with Unilever, which expanded its research and development efforts. In September 2013, the Company and Unilever entered into a commercial supply agreement for at least 10,000 MT of the Company's algae oil. In May 2014, Unilever announced the initial introduction of the Company's sustainable algae oil into one of its biggest soap brands, Lux.

In March 2016, the Company entered into a multi-year global supply agreement with Unilever, which includes a broad portfolio of our algae oils for Unilever to purchase. Production of these oils will take place at the Solazyme Bunge JV facility in Brazil and pricing terms are based upon variable production cost plus a defined contribution margin. The agreement contains certain minimum and maximum sales volumes and is subject to other terms and conditions. Unilever is a strategic development partner and customer for the Company. The Company intends to continue managing the strategic relationship with Unilever and has assigned the rights and responsibilities to deliver against the current supply agreement to the Solazyme Bunge JV, and accordingly revenue related to the Unilever supply agreement was recognized by the Solazyme Bunge JV in the three months ended June 30, 2016. The Company expects to formalize the assignment agreement with the Solazyme Bunge JV in the three months ending September 30, 2016.

14. DEBT

A summary of the Company's debt as of June 30, 2016 and December 31, 2015 was as follows (in thousands):

	June 30, 2016	December 31, 2015
Convertible debt:		
2018 Notes	$ 57,462	$ 61,632
2019 Notes	148,072	149,500
Total debt	205,534	211,132
Add:		
Fair value of embedded derivative	—	82
Less:		
Unamortized debt discount	(7,341)	(8,749)
Debt issuance costs	(365)	(450)
Long-term portion of debt	$ 197,828	$ 202,015

The Company was in compliance with all debt covenants as of June 30, 2016 and December 31, 2015.

Convertible Senior Subordinated Notes -2018 Notes —As of June 30, 2016 , the Company had $57.5 million aggregate principal amount outstanding of 2018 Notes. The 2018 Notes bear interest at a fixed rate of 6.00% per year, payable semiannually in arrears on August 1 and February 1 of each year. The 2018 Notes are convertible into the Company's common stock and may be settled as described below. The 2018 Notes will mature on February 1, 2018, unless earlier repurchased or converted. The Company may not redeem the 2018 Notes prior to maturity.

The 2018 Notes are convertible at the option of the holders at any time prior to the close of business on the scheduled trading day immediately preceding February 1, 2018 into shares of the Company's common stock at the then-applicable conversion rate. The conversion rate is initially 121.1240 shares of common stock per $1,000 principal amount of 2018 Notes (equivalent to an initial conversion price of approximately $8.26 per share of common stock). With respect to any conversion prior to November 1, 2016 (other than conversions in connection with certain fundamental changes where the Company may be required to increase the conversion rate as described below), in addition to the shares deliverable upon conversion, holders are entitled to receive an early conversion payment equal to $83.33 per $1,000 principal amount of 2018 Notes surrendered for conversion that may be settled, at the Company's election, in cash or, subject to satisfaction of certain conditions, in shares of the Company's common stock.

Convertible Senior Subordinated Notes - 2019 Notes — As of June 30, 2016 , the Company had $148.1 million aggregate principal amount outstanding of 5.00% Convertible Senior Subordinated 2019 Notes. The 2019 Notes bear interest at a fixed rate of 5.00% per year, payable semiannually in arrears on April 1 and October 1 of each year. The 2019 Notes are convertible into the Company's common stock and may be settled early as described below. The 2019 Notes will mature on October 1, 2019, unless earlier repurchased or converted. The Company may not redeem the 2019 Notes prior to maturity.

The 2019 Notes are convertible at the option of the holders on any day prior to and including the scheduled trading day prior to October 1, 2019. The 2019 Notes will initially be convertible at a conversion rate of 75.7576 shares of Common Stock per $1,000 principal amount of 2019 Notes (equivalent to an initial conversion price of $13.20 per share of Common Stock), subject to adjustment upon the occurrence of certain events. With respect to any conversion prior to January 1, 2018 (other than conversions in connection with certain fundamental changes where the Company may be required to increase the conversion rate as described below), in addition to the shares deliverable upon conversion, holders are entitled to receive an early conversion payment equal to $83.33 per $1,000 principal amount of 2019 Notes surrendered for conversion that may be settled, at the Company's election, in cash or shares of the Company's common stock.

Debt Conversion —In April 2016, the Company exchanged 2018 and 2019 notes totaling approximately $5.6 million by issuing 1,645,753 shares (including 804,986 inducement shares) of Common Stock. The Company recorded a non-cash debt conversion expense of approximately $1.8 million related to the exchange in the three months ended June 30, 2016.

HSBC Facility —The Company had a loan and security agreement with HSBC Bank, USA, National Association ("HSBC") that provided for a $35.0 million revolving facility (the "HSBC facility") for working capital, letters of credit denominated in U.S. dollars or a foreign currency and other general corporate purposes. A portion of the HSBC facility also supported the bank guarantee issued to BNDES in May 2013. The HSBC Facility expired on May 31, 2016.

SVB Standby Letter of Credit and Loan and Security Agreement —In the second quarter of 2016, the Company and Silicon Valley Bank entered into an agreement ("SVB Agreement") that provides for a $12.9 million letter of credit facility (the "Facility") denominated in U.S. dollars or a foreign currency. On April 29, 2016, Silicon Valley Bank issued a standby letter of credit ("SVB SLOC") to support a bank guarantee issued on behalf of the Company to BNDES in connection with the loan agreement entered into in 2013 between BNDES and the Solazyme Bunge JV. The SVB SLOC is being supported by a bank confirmation issued by the Bank of Nova Scotia (the "Scotia Bank Confirmation") on behalf of Silicon Valley Bank. The Company will pay fees of 1.5% and 0.7% of the collateral per annum related to the SVB SLOC and the Scotia Bank Confirmation, respectively. The Company will also pay a fee of 1.99% of the collateral per annum for the issuance of the bank guarantee to BNDES. The Company is subject to customary events of default under the SVB Agreement. The Company has not recorded any liability for this guarantee as of June 30, 2016, as the probability of performance is considered to be not sufficient to justify a liability.

Under the SVB Agreement, the Company is subject to financial covenants and covenants related to our 2018 Notes and 2019 Notes, as well as customary negative covenants. The SVB Agreement also contains certain customary representations and warranties, affirmative covenants and provisions relating to events of default.

15. COMMITMENTS AND CONTINGENCIES

Legal Matters

Securities Class Action Litigation

In June 2015, a securities class action complaint entitled Norfolk County Retirement System v. Solazyme, Inc. et al. was filed against the Company, its CEO, Jonathan Wolfson, its CFO/COO, Tyler Painter, certain of its current and former directors, and the underwriters of its March 2014 equity and debt offerings, Goldman, Sachs & Co., Inc. and Morgan Stanley & Co. LLC,

in the U.S. District Court for the Northern District of California. The complaint asserts claims for alleged violations of Sections 11, 12(a)(2), and 15 of the Securities Act of 1934, as well as Sections 10(b) and 20(a) of the Securities Exchange Act of 1934. The complaint seeks unspecified damages on behalf of a purported class that would comprise all individuals who acquired the Company's securities (i) between February 27, 2014 and November 5, 2014 and (ii) pursuant and/or traceable to the Company's public equity and debt offerings in March 2014. The complaint alleges that investors were misled by statements made during that period about the construction progress, development, and production capacity associated with the production facility located in Brazil owned by the Company's joint venture, Solazyme Bunge Produtos Renovaveis Ltda. In October 2015, the lead plaintiff was selected in the action and an amended complaint was filed in December 2015. The Company filed a Motion to Dismiss the action in February 2016 that was heard in May 2016. The Company believes the complaint lacks merit, and intends to defend itself vigorously.

Derivative Litigation

In July 2015, a complaint entitled Jim Bertonis, derivatively on behalf of Solazyme, Inc. v. Jonathan Wolfson et al. was filed in the Superior Court of California, County of San Mateo. The complaint seeks unspecified damages, purportedly on behalf of the Company from certain of its current and former directors and officers and alleges these defendants breached their fiduciary duties to the Company and unjustly enriched themselves by making allegedly false and misleading statements and omitting certain material facts in the Company's securities filings and other public disclosures. This purported stockholder derivative action is based on substantially the same facts as the securities class action described above. Based on a review of the plaintiffs' allegations, the Company believes that the plaintiff has not demonstrated standing to sue on its behalf.

In August 2015, a complaint entitled Gregory M. Miller, derivatively on behalf of Solazyme, Inc. v. Jonathan S. Wolfson et al. was filed in the U.S. District Court for the Northern District of California. The complaint seeks unspecified damages, purportedly on behalf of the Company from certain of its current and former directors and officers and alleges these defendants breached their fiduciary duties to the Company and aided and abetted the Company in making allegedly false and misleading statements and omitting certain material facts in the Company's securities filings and other public disclosures. This purported stockholder derivative action is based on substantially the same facts as the securities class action and the Bertonis derivative action described above. Based on a review of the plaintiffs' allegations, the Company believes that the plaintiff has not demonstrated standing to sue on its behalf.

In May 2016, a complaint entitled Ben Wang, derivatively on behalf of TerraVia Holdings, Inc. v. Jonathan S. Wolfson et al. was filed in the Superior Court of California, County of San Mateo. The complaint seeks unspecified damages, purportedly on behalf of the Company from certain of its current and former directors and officers and alleges these defendants breached their fiduciary duties to the Company and aided and abetted the Company in making allegedly false and misleading statements and omitting certain material facts in the Company's securities filings and other public disclosures. This purported stockholder derivative action is based on substantially the same facts as the securities class action and the Bertonis and Miller derivative actions described above. Based on a review of the plaintiffs' allegations, the Company believes that the plaintiff has not demonstrated standing to sue on its behalf.

Roquette Frères, S.A.

In September 2013, an arbitration (the "Roquette Arbitration") was initiated with Roquette Frères, S.A. ("Roquette") in connection with the dissolution of a joint venture between the Company and Roquette known as Solazyme Roquette Nutritionals L.L.C. ("SRN"). The Company sought a declaration that, in accordance with the terms of the joint venture agreement between the parties, the Company should be assigned all improvements made by or on behalf of SRN to the Company's intellectual property. On February 19, 2015 the arbitration panel released its decision, ordering, inter alia, the assignment to the Company of (i) all SRN patent applications, (ii) all SRN know-how related to high lipid algae flour and high protein algae powder and (iii) all Roquette patent applications filed since November 2010 relating to algae food and food ingredients, as well as methods for making and using them. In addition, the arbitration panel ordered Roquette to pay to the Company, $2.3 million in legal costs and fees. The arbitration award was confirmed by order of the U.S. District Court for the District of Delaware on December 21, 2015. Roquette has appealed the confirmation of the arbitration award to the U.S. Court of Appeals for the Third Circuit. Pending this appeal, the confirmation of the arbitration award has been stayed by order of the U.S. District Court for the District of Delaware by order dated January 12, 2016, in which the Court granted not only a stay but also enjoined Roquette from pursuing any further commercialization of any technology arguably within the ambit of the arbitral decision, including the sale of products. The appeal is scheduled to be heard by the Third Circuit in September 2016.

In November 2014, Roquette filed an action against the Company in U.S. District Court for the District of Delaware for declaratory judgment related to the Roquette Arbitration. Roquette seeks a declaration that (i) the arbitrators in the Roquette Arbitration exceeded their authority by failing to render a timely arbitration award, (ii) any award issued by the arbitrators is void and (iii) all intangible assets of SRN should be assigned jointly to Roquette and the Company. Other than seeking its

attorney fees and costs in the action, Roquette did not make any monetary claims against the Company. The Company filed an Answer to the Complaint in January 2015, denying substantially all of Roquette's claims and all of its prayers for relief.

In February 2015 Roquette filed a second action against the Company in U.S. District Court for the District of Delaware for declaratory judgment related to the Roquette Arbitration. Roquette sought a declaration that (A) the order of the arbitrators in the Roquette Arbitration for more discovery and new hearings was unenforceable and (B) in the alternative, the proposed new discovery and hearings concerned an issue that was outside the scope of the arbitration. Other than seeking its attorney fees and costs in the action, Roquette did not make any monetary claims against the Company. The two Delaware actions were consolidated in February 2015. The Company filed its Answer to the second Complaint in February 2015, denying all claims made in the Complaint and all related prayers for relief. In addition, the Company cross-claimed for (x) confirmation of the arbitration award, (y) an order compelling Roquette to comply with the arbitration award and (z) damages for misappropriation of the Company's trade secrets, misuse of the Company's confidential information and breach of contract. In April 2015 Roquette filed motions for summary judgment in each of the two declaratory judgment actions commenced by Roquette and a motion to vacate the award rendered in the Roquette Arbitration, which included counterclaims alleging the Company misused certain Roquette trade secrets. The summary judgment motions made by Roquette were denied in an opinion of the court dated December 21, 2015. All further proceedings under the declaratory actions have been stayed pending the Third Circuit appeal described above.

The Company may be involved, from time to time, in additional legal proceedings and claims arising in the ordinary course of its business. Such matters are subject to many uncertainties and outcomes are not predictable with assurance. The Company accrues amounts, to the extent they can be reasonably estimated, that it believes are adequate to address any liabilities related to legal proceedings and other loss contingencies that the Company believes will result in a probable loss. While there can be no assurances as to the ultimate outcome of any legal proceeding or other loss contingencies involving the Company, management does not believe any pending matters individually and in the aggregate will be resolved in a manner that would have a material effect on the Company's consolidated financial position, results of operations or cash flows.

16. STOCK-BASED COMPENSATION

The following table summarizes the components and classification of stock-based compensation expense related to stock options, restricted stock units and awards ("RSUs" and "RSAs"), performance-based restricted stock units ("PSUs") and the 2011 ESPP for the three and six months ended June 30, 2016 and 2015 (in thousands):

	Three Months Ended June 30,		Six Months Ended June 30,	
	2016	2015	2016	2015
Stock options	$ 2,011	$ 3,208	$ 4,045	$ 5,455
RSUs/RSAs	1,016	1,334	2,021	3,111
ESPP	58	177	(245)	222
Stock-based compensation expense	$ 3,085	$ 4,719	$ 5,821	$ 8,788
Research and development	$ 757	$ 1,473	$ 1,301	$ 2,585
Sales, general and administrative	2,328	3,246	4,520	6,203
Stock-based compensation expense	$ 3,085	$ 4,719	$ 5,821	$ 8,788

17. CONVERTIBLE PREFERRED STOCK

In March 2016, the Company issued 27,850 shares of Convertible Preferred Stock for cash proceeds of $27.1 million , net of issuance costs of $0.8 million . Starting in July 2016, shares of the Series A Preferred Stock are convertible at the option of the holders into shares of Common Stock, at an initial conversion price of $2.00 per share, subject to customary adjustments in the event of stock splits and certain other changes to the Company's capitalization. The Company has classified the convertible preferred stock as temporary equity in the condensed consolidated balance sheet as of June 30, 2016 due to the existence of certain change in control provisions that are not solely within the Company's control.

The convertible preferred stock contains the following terms and conditions:

- *Dividends* . The holders are entitled to participate equally and ratably with the Common Stock in all dividends and distributions on an as-converted basis, subject to certain customary exceptions. The Preferred Stock will also rank senior to the Common Stock.
- *Liquidation Preference* . In the event of any voluntary or involuntary liquidation, dissolution or winding up of the Company or certain change of control transactions, each holder will be entitled to receive a liquidation preference before any distribution or payment is made to holders of the Common Stock or any other security that ranks junior to the Preferred Stock.
- *Voting Rights.* Holders will be entitled to vote together as a single class with the holders of the Common Stock on all matters submitted for a vote by holders of the Common Stock, with each such holder of Preferred Stock being entitled to cast a number of votes equal to the number of whole shares of Common Stock issuable upon conversion of such Preferred Stock.
- *Board Representation* . For so long the outstanding shares of Preferred Stock represent at least 5.0% of the Company's outstanding voting power on an as-converted basis, the holders will have the right to designate a nominee for election to the Company's Board of Directors, subject to certain exceptions.
- *Protective Provisions* . For so long as at least 1,392 shares of Preferred Stock remain outstanding, the Company may not, without the approval of the holders of at least two-thirds of the then outstanding shares of Preferred Stock: (i) amend any provision of the Certificate of Designations or the Company's Amended and Restated Certificate of Incorporation or bylaws so as to adversely affect the rights, preferences or privileges of the Preferred Stock; or (ii) declare or pay any divided on the Common Stock, subject to certain customary exceptions. In addition, for so long as at least 11,140 shares of Preferred Stock remain outstanding, the Company may not, without the approval of the holders of at least two-thirds of the then outstanding shares of Preferred Stock, create, authorize or issue any equity securities senior to the Preferred Stock.
- *Mandatory Conversion* . The Company can require the conversion of the outstanding shares of Preferred Stock if either the trading price of the Common Stock is greater than three times the conversion price before the third anniversary of the Initial Closing or is greater than four times the conversion price thereafter, subject to certain customary conditions.
- *Transfer Restrictions* . No holder of any shares of Preferred Stock may transfer such shares except to an affiliate of such holder or the Company. If the transfer is to an affiliate, such affiliate must become a party to the Registration Rights Agreements. In addition, if such affiliate would beneficially own five percent or more of the Company's aggregate voting power after giving effect to the transfer, they must enter into a customary standstill agreement.

18. SUBSEQUENT EVENTS

On August 2, 2016, the Company entered into a definitive agreement to sell a majority interest in its Algenist® business to Tengram Capital Partners. The Company expects this transaction to close by September 30, 2016. Upon closing, the Company will receive approximately $20 million in cash and will retain approximately a 20% ownership interest in the Algenist business. The Company will continue to supply active ingredients formulated in the Algenist product line to Algenist. After closing, the Company will reclassify the historical results of Algenist as discontinued operations in future filings.

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

Forward-Looking Statements

The following discussion and analysis should be read together with our unaudited interim condensed consolidated financial statements and the other financial information appearing elsewhere in this Quarterly Report on Form 10-Q. This discussion contains forward-looking statements reflecting our current expectations and involves risks and uncertainties. In some cases, you can identify forward-looking statements by terminology such as "may," "will," "should," "expect," "plan," "anticipate," "believe," "estimate," "predict," "intend," "potential" or "continue" or the negative of these terms or other comparable terminology. For example, statements regarding our strategy and expectations as to future financial and operating performance and focus, future selling prices and margins for our products, attributes and performance of our products, manufacturing capacity, expense levels and liquidity sources and our ability to successfully complete the sale of our Algenist business are forward-looking statements. Our actual results and the timing of events may differ materially from those discussed in our forward-looking statements as a result of various factors, including those discussed below and those discussed in the section entitled "Risk Factors" included in this Quarterly Report on Form 10-Q and in our other filings with the Securities and Exchange Commission (SEC).

Overview

We are a food, nutrition and specialty ingredients company that harnesses the power of algae, the origin of all plants. Our innovative platform uses microalgae to produce high-value triglyceride oils, proteins, fibers, micronutrients and other ingredients. The inherent flexibility of our technology platform and the broad usage of these materials across multiple industries allow us to approach a wide range of customers across myriad end markets. In May 2016, we changed our name from "Solazyme, Inc." to "TerraVia Holdings, Inc.", and changed our Nasdaq ticker listing from SZYM to TVIA. With the transition to the TerraVia brand and our refined focus on food, nutrition and specialty ingredients, we announced in March 2016 our intention to attract a new CEO with proven industry experience in food and nutrition to drive commercial growth. On August 8, 2016, we announced the appointment of Apu Mody as our Chief Executive Officer, effective upon the commencement of his employment with TerraVia, expected to occur on or about August 22, 2016.

The unique composition of our oils, powders and other algae-derived products address specific customer requirements. We are commercializing high-value oils and powder products with companies that primarily use them as ingredients. We have developed and are commercializing products for specialty food ingredients, animal nutrition ingredients, consumer food products and specialty skin and personal care ingredients. Over our history, we have also invested in and developed products, technology and market opportunities in the industrials area, which includes fuels, industrial oils, and the oilfield/Encapso ® business. In line with our strategy to focus our commercial efforts on food and specialty personal care ingredients, we expect to pursue strategic alternatives for the industrials business and our objective will be to identify partners who have the operational capabilities needed to realize the potential of those businesses.

Our food oils are formulated to offer a variety of functional benefits such as enhanced structuring capabilities and stability while providing robust formulation and process flexibility. These food oils have the potential to improve upon conventionally utilized specialty fats and oils and our high oleic algae oil has received an FDA generally recognized as safe (GRAS) "No Questions" letter. Currently, these oils are commercially available in our AlgaWise ® branded food oil platform and in our consumer culinary oil Thrive® brand. In addition, we have developed novel methods of preparing powdered forms of triglyceride oils and vegan proteins, and our powdered ingredients are composed of unmodified whole algae cells. AlgaVia ® Lipid Powder (commonly known as whole algae flour) and AlgaVia ® Protein (commonly known as whole algae protein) are whole algae ingredients that can improve the nutritional profile of foods and beverages. AlgaVia ® Lipid Powder is a new fat source that allows for the reduction or replacement of dairy fats, oils, and eggs. AlgaVia ® Protein is a new vegan source of protein that is free of known allergens and gluten. Both AlgaVia ® Lipid Powder and Protein can be used across a range of applications such as beverages (ready-to-drink and powdered), bakery, snacks, bars, dressings, sauces and frozen desserts and have received FDA GRAS "No Questions" letters. In May 2016, we and Bunge announced that we launched a native, whole algae DHA, docosahexaenoic acid, a long chain omega-3 fatty acid as a sustainable specialty feed ingredient, prioritizing the aquaculture market.

Our process is compatible with commercial-scale, widely-available fermentation and oil recovery equipment. We operate our lab and pilot fermentation and recovery equipment as scaled-down versions of our large commercial engineering designs, such as those used to perform development work under certain agreements with strategic partners and to fulfill commercial supply agreements. We have scaled up our technology platform and have successfully operated at lab (5-15 liter), pilot (600-1,000 liter), demonstration/small commercial (120,000 liter) and large commercial (approximately 500,000 liter and above) fermenter scale.

On August 2, 2016 we entered into a definitive agreement to sell a majority interest in Algenist® to Tengram Capital Partners . We expect this transaction to close by September 30, 2016. Upon closing, we will receive approximately $20 million in cash and will retain approximately a 20% ownership interest in the Algenist business. We will continue to supply active ingredients formulated in the Algenist product line to Algenist. After closing, we will reclassify the historical results of Algenist as discontinued operations in future filings.

Critical Accounting Policies and Estimates

Critical accounting policies are those accounting policies that management believes are important to the portrayal of our financial condition and results and require management's most difficult, subjective or complex judgments, often as a result of the need to make estimates about the effect of matters that are inherently uncertain. Our 2015 Annual Report on Form 10-K includes a description of certain critical accounting policies, including those with respect to revenue recognition, inventories, stock-based compensation and income taxes. There have been no material changes to the Company's critical accounting policies described in the Company's 2015 Annual Report on Form 10-K.

Results of Operations

Comparison of Three Months Ended June 30, 2016 and 2015

Revenues

	Three Months Ended June 30,		
	2016	2015	$ Change
	(In thousands)		
Revenues:			
Product revenues	$ 6,355	$ 8,307	$ (1,952)
Research and development programs	3,592	3,433	159
Total revenues	$ 9,947	$ 11,740	$ (1,793)

We have two reportable segments for financial statement reporting purposes: 1) Algenist®, and 2) Ingredients and Other. The Algenist segment includes sales of our Algenist® brand skin and personal care products. The Ingredients and Other segment includes sales of our food, nutrition and specialty ingredients; and also includes sales of our Industrial oils, Encapso ® product, and fuel blend sales related to our fuels marketing and commercial development programs. Our discussions below surrounding changes in product revenue and gross margin are based on these two reportable segments. As discussed in the overview above, on August 2, 2016 we entered into a definitive agreement to sell a majority interest in Algenist® to Tengram Capital Partners

Product Revenues and Cost of Product Revenues

Product revenues and cost of product revenues by segment for the three months ended June 30, 2016 and 2015 were as follows:

	Three Months Ended June 30,		
	2016	2015	Change
	(In thousands)		
Algenist ®			
Product revenues	$ 5,499	$ 5,191	$ 308
Cost of product revenues	1,865	1,347	518
Gross margin	$ 3,634	$ 3,844	$ (210)
Gross margin %	66 %	74%	(8)%
Ingredients and Other			
Product revenues	$ 856	$ 3,116	$ (2,260)
Cost of product revenues	860	3,014	(2,154)
Gross margin (loss)	$ (4)	$ 102	$ (106)
Gross margin %	— %	3%	(3)%

Algenist ®

Algenist ® product revenues increased $0.3 million in the three months ended June 30, 2016 compared to the same period last year primarily as a result of new product launches. Algenist ® gross margin of 66% in the three months ended June 30, 2016 was lower than the gross margin of 74% in the three months ended June 30, 2015 primarily as a result of second quarter 2015 inventory reserve adjustments, which increased the second quarter 2015 gross margin by 6%. As discussed in the overview above, on August 2, 2016 we entered into a definitive agreement to sell a majority interest in Algenist® to Tengram Capital Partners .

Ingredients and Other

Ingredients and Other product revenues decreased $2.3 million in the three months ended June 30, 2016 compared to the same period last year due to decreased product sales related to our fuels marketing and commercial development program, Encapso ® and industrial oil products, consistent with our strategy to focus on high value product sales.

During scale-up of the manufacturing process at the ADM Clinton and ANP Galva Facilities in 2015, certain production costs were charged to research and development and selling, general and administrative expenses. Gross margins for our Ingredients and Other products would have been lower in 2015 if such production costs had not been charged to operating expenses.

The gross margin for Ingredients and Other product sales gross margin was 0% in the three months ended June 30, 2016 compared to a 3% gross margin in the same period last year, primarily due to changes in product mix.

We plan to focus on our production at the Solazyme Bunge JV facility and at our Peoria facility in the immediate future and believe this strategic decision will better align our immediate production assets with our operating strategy while minimizing production costs.

Research and Development Programs Revenue

We are currently engaged in development activities with multiple strategic partners and the Solazyme Bunge JV, and although we expect funded program revenue to remain an important indication of strategic commitment from partners and a source of future customers, we expect funded program revenue to become a less meaningful part of our overall revenue as our focus shifts to commercialization and product revenues. Our revenues from development agreements with the Solazyme Bunge JV and strategic partners fluctuate due to timing and terms of the development work performed and achievement of contract milestones defined in these agreements. Revenues from research and development of $3.6 million were relatively constant in the three months ended June 30, 2016 compared to the same period last year.

Operating Expenses

	Three Months Ended June 30,		
	2016	2015	$ Change
	(In thousands)		
Operating expenses:			
Research and development	$ 8,276	$ 12,747	$ (4,471)
Sales, general and administrative	16,000	20,981	(4,981)
Restructuring charges	49	(31)	80
Total operating expenses	$ 24,325	$ 33,697	$ (9,372)

Research and Development Expenses

Research and development expenses decreased $4.5 million in the three months ended June 30, 2016 compared to the same period last year, due primarily to decreases in personnel-related costs of $2.3 million, scale-up production costs related to operations at the Clinton/Galva facilities of $0.6 million, consumable and supply costs of $0.4 million and product development, process development costs, and other costs of $0.7 million. Personnel-related costs include non-cash stock-based compensation expense of $0.8 million in the three months ended June 30, 2016 compared to $1.5 million in the same period last year.

We expect overall research and development costs to decrease in 2016, compared to 2015, in particular personnel-related costs, as a result of the reduction in workforce and other cost-cutting measures we have implemented. We plan to continue to make investments in research and development for the foreseeable future, but at a lower rate, as we continue to (1) identify, isolate and further optimize strains of microalgae to achieve high cell densities, high yield converting sugar to product and high productivity rates compared to other alternatives; (2) customize oil outputs to meet specific market needs; and (3) engage in product and process development projects aimed at reducing the cost of oil production.

Sales, General and Administrative Expenses

Sales, general and administrative expenses decreased $5.0 million in the three months ended June 30, 2016 compared to the same period last year primarily due to decreased fixed third-party facilities costs associated with the Clinton/Galva facilities of $3.4 million and decreased personnel-related costs of $1.7 million. Personnel-related costs include non-cash stock-based compensation expense of $2.3 million in the three months ended June 30, 2016 compared to $3.2 million in the same period last year.

We plan to continue to invest in commercialization of our high value products within the food, nutrition and specialty ingredients markets, which may increase our overall selling, general and administrative expense, but expect personnel-related expenses to decrease as a result of a reduction in workforce and other cost-cutting measures we implemented starting in December 2014 and January 2016.

Debt Conversion Expense

In April 2016, we exchanged 2018 and 2019 Notes totaling approximately $5.6 million by issuing 1,645,753 shares (including 804,986 inducement shares) of Common Stock. We recorded a non-cash non-operating charge of approximately $1.8 million related to the exchange agreement in the three months ended June 30, 2016.

Loss from Equity Method Investment

Loss from equity method investments decreased to $5.4 million in the three months ended June 30, 2016 compared to $7.3 million in the same period last year, primarily due to an increase in the Solazyme Bunge JV revenue, and changes in the Brazilian real compared to the United States dollar. We expect the loss from our equity method investment to decrease as the Solazyme Bunge JV continues optimization of the Solazyme Bunge JV Plant and works toward high volume commercial-scale production.

Results of Operations

Comparison of Six Months Ended June 30, 2016 and 2015

Revenues

	Six Months Ended June 30,		
	2016	2015	$ Change
		(In thousands)	
Revenues:			
Product revenues	$ 13,627	$ 17,128	$ (3,501)
Research and development programs	7,179	7,217	(38)
Total revenues	$ 20,806	$ 24,345	$ (3,539)

Product Revenues and Cost of Product Revenues

Product revenues and cost of product revenues by segment for the six months ended June 30, 2016 and 2015 were as follows:

	Six Months Ended June 30,		
	2016	2015	Change
		(In thousands)	
Algenist ®			
Product revenues	$ 11,470	$ 11,402	$ 68
Cost of product revenues	3,788	3,667	121
Gross margin	$ 7,682	$ 7,735	$ (53)
Gross margin %	67%	68%	(1)%
Ingredients and Other			
Product revenues	$ 2,157	$ 5,726	$ (3,569)
Cost of product revenues	2,154	5,364	(3,210)
Gross margin	$ 3	$ 362	$ (359)
Gross margin %	—%	6%	(6)%

Algenist ®

Algenist ® product revenues increased $0.1 million in the six months ended June 30, 2016 compared to the same period last year. Algenist ® gross margin decreased to 67% in the six months ended June 30, 2016 from 68% in the six months ended June 30, 2015 . As discussed in the overview above, on August 2, 2016 we entered into a definitive agreement to sell a majority interest in Algenist® to Tengram Capital Partners .

Ingredients and Other

Ingredients and Other product revenues decreased $3.6 million in the six months ended June 30, 2016 compared to the same period last year due to decreased product sales related to our fuels marketing and commercial development program, Encapso ® and industrial oil products, consistent with our strategy to focus on high value product sales.

During scale-up of the manufacturing process at the ADM Clinton and ANP Galva Facilities in 2015, certain production costs were charged to research and development and selling, general and administrative expenses. Gross margins for our Ingredients and Other products would have been lower in 2015 if such production costs had not been charged to operating expenses.

The gross margin for Ingredients and Other product sales gross margin was 0% in the six months ended June 30, 2016 compared to a 6% gross margin in the same period last year, primarily due to changes in product mix.

We plan to focus on our production at the Solazyme Bunge JV facility and at our Peoria facility in the immediate future and believe this strategic decision will better align our immediate production assets with our operating strategy while minimizing production costs. We expect costs of goods as a percentage of revenues will be higher for ingredient products as compared to Algenist ® cost of goods.

Research and Development Programs Revenue

Revenues from research and development revenues of $7.2 million in the six months ended June 30, 2016 were relatively constant compared to the same period last year.

Operating Expenses

	Six Months Ended June 30,		
	2016	2015	$ Change
		(In thousands)	
Operating expenses:			
Research and development	$ 16,507	$ 25,301	$ (8,794)
Sales, general and administrative	32,768	42,249	(9,481)
Restructuring charges	1,239	393	846
Total operating expenses	$ 50,514	$ 67,943	$ (17,429)

Research and Development Expenses

Research and development expenses decreased $8.8 million in the six months ended June 30, 2016 compared to the same period last year, due primarily to decreases in personnel-related costs of $4.2 million, product development, process development, and other costs of $2.1 million, scale-up production costs related to operations at the Clinton/Galva facilities of $0.8 million, and consumable supply costs of $0.5 million. Personnel-related costs include non-cash stock-based compensation expense of $1.3 million in the six months ended June 30, 2016 compared to $2.6 million in the same period last year.

Sales, General and Administrative Expenses

Sales, general and administrative expenses decreased $9.5 million in the six months ended June 30, 2016 compared to the same period last year primarily due to decreased fixed third-party facilities costs associated with the Clinton/Galva facilities of $7.3 million and decreased personnel-related costs of $3.3 million, partially offset by increased external legal costs of $0.8 million. Personnel-related costs include non-cash stock-based compensation expense of $4.5 million in the six months ended June 30, 2016 compared to $6.2 million in the same period last year.

Debt Conversion Expense

In April 2016, we exchanged 2018 and 2019 Notes totaling approximately $5.6 million by issuing 1,645,753 shares (including 804,986 inducement shares) of Common Stock. We recorded a non-cash non-operating charge of approximately $1.8 million related to the exchange agreement in the six months ended June 30, 2016.

Loss from Equity Method Investment

Loss from equity method investments decreased to $10.2 million in the six months ended June 30, 2016 compared to $12.4 million in the same period last year, primarily due to an increase in the Solazyme Bunge JV revenue, and changes in the Brazilian real compared to the United States dollar.

Liquidity and Capital Resources

Total cash and cash equivalents and marketable securities available-for-sale were:

	June 30, 2016	December 31, 2015
	(In thousands)	
Cash and cash equivalents	$ 49,216	$ 46,966
Marketable securities, available for sale	33,307	51,009
Total cash and cash equivalents and marketable securities	$ 82,523	$ 97,975

Cash, cash equivalents and marketable securities decreased by $15.5 million in the six months ended June 30, 2016 , primarily due to cash used in operating activities of $36.9 million and $5.0 million of capital contributed to the Solazyme Bunge JV, partially offset by net proceeds from issuance of convertible preferred stock of approximately $27.1 million .

The following table shows a summary of our cash flows for the periods indicated:

	Six Months Ended June 30,	
	2016	2015
	(In thousands)	
Net cash used in operating activities	$ (36,870)	$ (49,026)
Net cash provided by investing activities	11,559	41,993
Net cash provided by financing activities	27,392	389

Liquidity

We are an emerging growth company with a limited operating history. We only recently began commercializing our products. To date, a substantial portion of revenues has consisted of funding from third party collaborative research agreements and government grants. We have generated limited revenues from commercial sales, principally derived from sales of skin and personal care products. A significant portion of future revenues are expected to come from commercial sales in the food and nutrition ingredients and specialty skin and personal care product markets.

Net losses may continue as we ramp up manufacturing capacity and build out our product pipeline. We expect to incur additional costs and expenses related to the continued development and expansion of our business, including research and development, the operation of our Peoria Facility and the ramp up and operation of the Solazyme Bunge JV Plant in Brazil.

We, along with our development and commercialization partners, need to develop products successfully, cost effectively produce them in large quantities and market and sell such products profitably. Our failure to generate sufficient revenues, achieve planned gross margins, control operating costs, successfully complete the sale of our Algenist business or raise sufficient additional funds may require us to modify, delay or abandon our planned operations, which could have a material adverse effect on the business, operating results, financial condition and ability to achieve intended business objectives. We may be required to seek additional funds through collaborations, public or private debt or equity financings or government programs, and may also seek to reduce expenses related to our operations. There can be no assurance that any financing will be available or on acceptable terms.

We believe that our current cash, cash equivalents, marketable securities and revenue from product sales will be sufficient to fund our current operations for at least the next 12 months. However, our liquidity assumptions may prove to be wrong, and we could utilize our available financial resources sooner than we currently expect. We may elect to raise additional funds within this period of time through public or private debt or equity financings and/or additional collaborations.

Cash Flows from Operating Activities

Cash used in operating activities was $36.9 million in the six months ended June 30, 2016 , primarily due to a loss of $54.0 million offset by non-cash charges. Non-cash charges included loss from equity method investments, debt conversion expense, stock-based compensation, depreciation and amortization, net amortization of premiums on marketable securities and debt discount and loan fee amortization.

Cash used in operating activities was $49.0 million in the six months ended June 30, 2015 primarily due to a loss of $71.8 million , aggregate non-cash charges of $26.2 million and a net change of $3.4 million in our net operating assets and liabilities.

Cash Flows from Investing Activities

Cash provided by investing activities was $11.6 million for the six months ended June 30, 2016 , primarily due to $17.8 million net proceeds from marketable securities, partially offset by $5.0 million of capital contributed to the Solazyme Bunge JV.

In the six months ended June 30, 2015 , cash provided by investing activities was $42.0 million , primarily due to $52.7 million of net marketable securities maturities, partially offset by $10.3 million of capital contributed to the Solazyme Bunge JV.

Cash Flows from Financing Activities

Cash provided by financing activities was $27.4 million in the six months ended June 30, 2016 , primarily due to net proceeds received of $27.1 million from the convertible preferred stock issuance in March 2016.

In the six months ended June 30, 2015 , cash provided by financing activities was $0.4 million , primarily due to proceeds received from common stock issuances pursuant to our equity plans.

BNDES Loan

In April 2012, we entered into the Solazyme Bunge JV, which is jointly capitalized by us and Bunge and which operates an oil production facility in Brazil. Through June 30, 2016 we contributed $104.8 million in capital to the Solazyme Bunge JV, and we may need to contribute additional capital to this project. In February 2013, the Solazyme Bunge JV entered a loan agreement with the Brazilian Development Bank (BNDES) under which it could borrow up to R$245.7 million (approximately USD $76.0 million based on the exchange rate as of June 30, 2016). As of June 30, 2016 , approximately $59.2 million was outstanding under the BNDES loan based on the exchange rate as of June 30, 2016 . We have provided a bank guarantee equal to 14.39% of the total amount available under the BNDES Loan and may be required to provide a corporate guarantee equal to 35.71% of the total amount available under the BNDES Loan (with the total amount covered by the guarantees not to exceed our ownership percentage in the Solazyme Bunge JV). We expect to evaluate the optimal amount of Solazyme Bunge JV-related capital expenditures that we agree to fund on a case-by-case basis. These events may require us to access additional capital through equity or debt offerings. If we are unable to access additional capital, our growth may be limited due to the inability to build out additional manufacturing capacity.

SVB Letter of Credit and Loan and Security Agreement

In the second quarter of 2016, we entered into an agreement with Silicon Valley Bank that provides for a $12.9 million letter of credit facility (the “Facility”) for letters of credit denominated in U.S. dollars or a foreign currency. On April 29, 2016, Silicon Valley Bank issued a standby letter of credit (“SVB SLOC”) to support the bank guarantee issued on our behalf to BNDES in connection with the loan agreement entered into in 2013 between BNDES and the Solazyme Bunge JV. The SVB SLOC is being supported by a bank confirmation issued by the Bank of Nova Scotia (the “Scotia Bank Confirmation”) on behalf of Silicon Valley Bank.

Contractual Obligations and Commitments

There have been no significant changes to the Company’s contractual obligations and commitments since the Company’s Annual Report on Form 10-K for the year ended December 31, 2015.

Off-Balance Sheet Arrangements

For information on variable interest entities and guarantees, refer to Note 11 in the accompanying notes to our unaudited interim condensed consolidated financial statements.

Recent Accounting Pronouncements

Refer to Note 2 in the accompanying notes to our unaudited interim condensed consolidated financial statements for a discussion of recent accounting pronouncements.

Item 3. Quantitative and Qualitative Disclosures about Market Risk.

We are exposed to financial market risks, primarily changes in interest rates, currency exchange rates and commodity prices. All of the potential changes noted below are based on sensitivity analyses performed on our financial positions as of June 30, 2016 . Actual results may differ materially.

Interest Rate Risk

Our exposure to market risk for changes in interest rates relates primarily to our investment portfolio and our outstanding debt obligations. We generally invest our cash in investments with short maturities or with frequent interest reset terms. Accordingly, our interest income fluctuates with short-term market conditions. As of June 30, 2016 , our investment portfolio consisted primarily of corporate debt obligations, U.S. government agency securities, asset-backed and mortgaged-backed securities, municipal bonds and money market funds, which are held for working capital purposes. We believe we do not have material exposure to changes in fair value as a result of changes in interest rates. Our marketable securities were comprised primarily of fixed-term securities as of June 30, 2016 . Due to the short-term nature of these instruments, we do not believe that there would be a significant negative impact to our condensed consolidated financial position or results of operations as a result of interest rate fluctuations in the financial markets. Our outstanding debt as of June 30, 2016 consists of fixed-rate debt, and therefore, is not subject to fluctuations in market interest rates.

Foreign Currency Risk

Our operations include manufacturing and sales activities primarily in the United States, as well as research activities primarily in the United States. We are actively expanding outside the United States, in particular in Brazil through our Solazyme Bunge JV. We sell our Algenist ® products in Europe and conduct operations in Brazil. As we expand internationally, our results of operations and cash flows will become increasingly subject to fluctuations due to changes in foreign currency exchange rates. For example, our operations in Brazil and/or potential expansion elsewhere in Latin America or increasing Euro denominated product sales to European distributors, will result in our use of currencies other than the U.S. dollar. In addition, the local currency is the functional currency of our Brazil subsidiary and the Solazyme Bunge JV (an unconsolidated joint venture). The assets and liabilities of the Brazil subsidiary are translated from its functional currency to U.S. dollars at the exchange rate in effect at the balance sheet date, with resulting foreign currency translation adjustments recorded in accumulated other comprehensive income (loss) in the condensed consolidated statements of comprehensive loss. The assets and liabilities of the Solazyme Bunge JV are also translated to U.S. dollars similar to our Brazil subsidiary, and we adjust our investment in the Solazyme Bunge JV and cumulative translation adjustment in equity for our ownership portion of the cumulative translation gain or loss recognized on the Solazyme Bunge JV's financial statements. As a result, our comprehensive income (loss), cash flows and expenses are subject to fluctuations due to changes in foreign currency exchange rates. In periods when the U.S. dollar declines in value as compared to the foreign currencies in which we incur expenses, our foreign-currency based expenses increase when translated into U.S. dollars. A hypothetical 10% adverse change in foreign currency exchange rate would have had a $0.7 million impact on our net loss for the six months ended June 30, 2016 . We have not hedged our foreign currency since the exposure has not been material to our historical operating results. Although substantially all of our sales are currently denominated in U.S. dollars, future fluctuations in the value of the U.S. dollar may affect the price competitiveness of our products outside the United States. We may consider hedging our foreign currency risk as we continue to expand internationally.

Commodity Price Risk

Our exposure to market risk for changes in commodity prices currently relates primarily to our purchases of plant sugar feedstock, and fuel in connection with our blended fuels marketing and commercial development programs. A hypothetical 10% change in the cost of plant sugar feedstock would have had approximately a $0.2 million impact on our share of loss from equity method investment in the Solazyme Bunge JV for the six months ended June 30, 2016 . We have not historically hedged the price volatility of plant sugar feedstock. Also, fluctuations in the prices of petroleum or certain plant oils may also impact our business to the extent our products compete with petroleum or plant-oil-derived products. In the future, we may manage our exposure to these risks by hedging the price volatility of such products, principally through futures contracts, and entering into joint venture agreements that would enable us to obtain secure access to feedstock. See also “Risk Factors-Risks Related to Our Business and Industry," A decline in the price of petroleum and petroleum-based products, plant oils or other commodities may reduce demand for our products and may otherwise adversely affect our business.

Item 4. Controls and Procedures.

Our management, including our Chief Executive Officer and Chief Financial Officer, evaluated the effectiveness of our disclosure controls and procedures as of June 30, 2016 . The term "disclosure controls and procedures," as defined in Rules 13a-15(e) and 15d-15(e) under the Exchange Act, means controls and other procedures of a company that are designed to ensure that information required to be disclosed by us in the reports that 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. Disclosure controls and procedures include, without limitation, controls and procedures designed to ensure that information required to be disclosed by us in the reports that we file or submit under the Exchange Act is accumulated and communicated to our management, including our Chief Executive Officer and Chief Financial Officer, as appropriate, to allow timely decisions regarding required disclosure. In designing and evaluating the disclosure controls and procedures, management recognizes that any controls and procedures, no matter how well designed and operated, can provide only reasonable, and not absolute, assurance of achieving the desired objectives. In reaching a reasonable level of assurance, management necessarily applies its judgment in evaluating the cost-benefit relationship of possible controls and procedures. Based on this evaluation, our Chief Executive Officer and Chief Financial Officer concluded that our disclosure controls and procedures were effective as of June 30, 2016 at the reasonable assurance level.

Changes in Internal Control Over Financial Reporting

There was no change in our internal control over financial reporting (as defined in Rules 13a-15(f) and 15d-15(f) under the Exchange Act) that occurred during the quarterly period ended June 30, 2016 that has materially affected, or is reasonably likely to materially affect, our internal control over financial reporting.

PART II: OTHER INFORMATION

Item 1. Legal Proceedings.

We may be involved, from time to time, in legal proceedings and claims arising in the course of our business. Such matters are subject to many uncertainties and there can be no assurance that such legal proceedings will not have a material adverse effect on our business, results of operations, financial position or cash flows. The information relating to "Legal Matters" set forth under Note 15 - Commitments and Contingencies of the notes to the unaudited interim condensed consolidated financial statements of this Quarterly Report on Form 10-Q is incorporated into this item by reference.

Item 1A. Risk Factors.

You should carefully consider the risks and uncertainties described below before investing in our publicly-traded securities. Additional risks and uncertainties not presently known to us or that our management currently deems immaterial also may impair our business operations. If any of the risks described below were to occur, our business, financial condition, operating results, and cash flows could be materially adversely affected. In such an event, the trading price of our common stock could decline and you could lose all or part of your investment. In assessing these risks and uncertainties, you should also refer to the other information contained in this Report, including our consolidated financial statements and related notes. The risks and uncertainties discussed below also include forward-looking statements, and our actual results may differ substantially from those discussed in these forward-looking statements. See Management's Discussion and Analysis of Financial Condition and Results of Operations-Forward-Looking Statements.

Risks Related to Our Business and Industry

We have a limited operating history and have incurred significant losses to date, anticipate continuing to incur losses and may never achieve or sustain profitability.

We are an emerging growth company with a limited operating history. We only recently began commercializing our products. To date, a substantial portion of our revenues has consisted of funding from third party collaborative research agreements and government grants. We have generated only limited revenues from commercial sales, the majority of which have been derived from sales of our skin and personal care products through our Algenist business, which we agreed to sell to a third party in August 2016. We expect a significant portion of our future revenues to come from commercial sales in food, nutrition, and specialty personal care ingredients.

We have incurred substantial net losses since our inception, including a net loss of $54.0 million during the six months ended June 30, 2016 . We expect these losses may continue as we ramp up our manufacturing capacity and build out our product pipeline. As of June 30, 2016 , we had an accumulated deficit of $663.9 million . We expect to incur additional costs and expenses related to the continued development and expansion of our business, including research and development, the operation of our Peoria Facility, the ramp up and operation of the Solazyme Bunge JV production facility (described below) and other commercial facilities. As a result, our annual and quarterly operating losses may continue.

We, along with our development and commercialization partners, will need to develop products successfully, cost effectively produce them in large quantities, and market and sell them profitably. If we fail to become profitable, or if we are unable to fund our continuing losses, we may be unable to continue our business operations. There can be no assurance that we will ever achieve or sustain profitability.

We have generated limited revenues from the sale of our products, and our business may fail if we are not able to successfully commercialize these products.

We have had only limited product sales to date, the majority of which have been derived from our Algenist business, which we agreed to sell to a third party in August 2016, and sales of our ingredients and other products have not historically generated positive gross margins. If we are not successful in replacing sales of Algenist products with sales of our other products at acceptable prices, further advancing our existing commercial arrangements with strategic partners, developing new arrangements, ramping up or otherwise increasing our manufacturing capacity and securing reliable access to sufficient volumes of low-cost feedstock, we will be unable to generate meaningful revenues from our products. We are subject to the substantial risk of failure facing businesses seeking to develop products based on a new technology.

Certain factors that could, alone or in combination, prevent us from successfully commercializing our products include:

- our ability to secure reliable access to sufficient volumes of low-cost feedstock;

- our ability to achieve commercial-scale production of our products on a cost-effective basis and in a timely manner;
- our ability to secure consistent and reliable supplies of power and steam for production facilities;
- technical or operational challenges with our manufacturing processes or with development of new products that we are not able to overcome;
- our ability to consistently manufacture our products within specifications;
- our ability to establish and maintain successful relationships with development, feedstock, manufacturing and commercialization partners;
- our ability to gain market acceptance of our products with customers and maintain customer relationships;
- our ability to sell our products at an acceptable price;
- our ability to manage our growth;
- our ability to meet applicable regulatory requirements for the production, distribution and sale of our products and to comply with applicable laws and regulations;
- actions of direct and indirect competitors that may seek to enter the markets in which we expect to compete or that may seek to impose barriers to one or more markets that we intend to target; and
- public concerns about the ethical, legal, environmental and social ramifications of the use of targeted recombinant technology, land use and the potential diversion of resources from food production.

The production of our microalgae-based products requires fermentable feedstock. The inability to obtain feedstock in sufficient quantities or in a timely and cost-effective manner may limit our ability to produce our products.

A critical component of the production of our microalgae-based products is access to feedstock in sufficient quantities and at an acceptable price to enable commercial production and sale. Other than as described below, we currently purchase feedstock, such as sugarcane-based sucrose and corn-based dextrose, for the production of our products at prevailing market prices.

We do not have any long-term supply agreements or other guaranteed access to feedstock other than for the supply of feedstock to Solazyme Bunge Produtos Renováveis Ltda. ("Solazyme Bunge Renewable Oils" or the "Solazyme Bunge JV") by our partner, Bunge Global Innovation, LLC and certain of its affiliates ("Bunge"), pursuant to our joint venture arrangement that includes a feedstock supply agreement. As we scale our production, we anticipate that the production of our microalgae-based products will require large volumes of feedstock, and we may not be able to contract with feedstock producers to secure sufficient quantities of feedstock at reasonable costs or at all. For example, sugarcane-based sucrose for the Solazyme Bunge JV facility in Moema, Brazil is being provided by Bunge. Sugar and corn are traded as commodities and are subject to price volatility. While we may seek to manage our exposure to fluctuations in the price of sugar and corn-based dextrose by entering into hedging transactions directly or through our joint venture arrangement, we may not be successful in doing so. If we cannot access feedstock in the quantities we need at acceptable prices, we may not be able to successfully commercialize our food ingredients, fuels, chemicals, encapsulated lubricant and other products, and our business will suffer. If we do not succeed in entering into long-term supply contracts when necessary or successfully hedge against our exposure to fluctuations in the price of feedstock, our costs and profit margins may fluctuate from period to period as we will remain subject to prevailing market prices.

Although our plan is to enter into partnerships, such as the Solazyme Bunge JV, with feedstock providers to supply the feedstock necessary to produce our products, we cannot predict the future availability or price of such feedstock or be sure that our feedstock partners will be able to supply such feedstock in sufficient quantities or in a timely manner. The prices of feedstock depend on numerous factors outside of our or our partners' control, including weather conditions, government programs and regulations, changes in global demand, rising or falling commodities and equities markets, and availability of credit to producers. Crop yields and sugar content depend on weather conditions such as rainfall and temperature. Variable weather conditions have historically caused volatility in feedstock crop prices due to crop failures or reduced harvests. For example, excessive rainfall can adversely affect the supply of feedstock available for the production of our products by reducing the sucrose content of feedstock and limiting growers' ability to harvest. Crop disease and pestilence can also occur from time to time and can adversely affect feedstock crop growth, potentially rendering useless or unusable all or a substantial portion of affected harvests. The limited amount of time during which feedstock crops keep their sugar content after harvest poses a risk of spoilage. Also, the fact that many feedstock crops are not themselves traded commodities limits our ability to

substitute supply in the event of such an occurrence. If our ability to obtain feedstock crops is adversely affected by these or other conditions, our ability to produce our products will be impaired, and our business will be adversely affected. In the near term we believe Brazilian sugarcane-based sucrose will be an important feedstock for us. Along with the risks described above, Brazilian sugarcane prices may also increase due to, among other things, changes in the criteria set by the Conselho dos Produtores de Cana, Açúcar e Álcool (Council of Sugarcane, Sugar and Ethanol Producers), known as Consecana. Consecana is an industry association of producers of sugarcane, sugar and ethanol that sets market terms and prices for general supply, lease and partnership agreements and may change such prices and terms from time to time. Moreover, Brazil has a developed industry for producing ethanol from sugarcane, and if we have manufacturing operations in Brazil that do not have a partner providing the sugarcane feedstock, such as Bunge as part of the Solazyme Bunge JV, we will need to compete for sugarcane feedstock with ethanol producers. Such changes and competition could result in higher sugarcane prices and/or a significant decrease in the volume of sugarcane available for the production of our products, which could adversely affect our business and results of operations.

We have entered into, and plan to enter into other, arrangements with feedstock producers to co-locate production at their existing mills, and if we are not able to complete and execute on these arrangements in a timely manner and on terms favorable to us, our business will be adversely affected.

In April 2012, we entered into a Joint Venture Agreement with Bunge, forming the Solazyme Bunge JV, which is doing business as Solazyme Bunge Renewable Oils. The Joint Venture Agreement was amended in October 2013 and again in October 2015 to expand the field and product portfolio. The Solazyme Bunge JV produces microalgae-based products in Brazil using our proprietary technology and sugarcane feedstock provided by Bunge. The Solazyme Bunge JV's production facility is located adjacent to a sugarcane processing mill in Brazil that is owned by Bunge. The acquisition of the facility site by the Solazyme Bunge JV from Bunge has been completed. The purchase of any additional land by the Solazyme Bunge JV would be complex, subject to multiple approvals from governmental authorities and take time to complete. The construction of the Solazyme Bunge JV's production facility began in June 2012, and the first commercial product from the Solazyme Bunge JV production facility was produced in the second quarter of 2014. Manufacturing operations and processes continue to be optimized as the facility is ramped up. In addition, we have entered into a series of research and development agreements with Bunge and with the Solazyme Bunge JV to, among other things, develop additional products for the Solazyme Bunge JV. The current funded projects extend through December 2018. We intend to continue to expand our manufacturing capacity by entering into additional agreements with feedstock producers that require them to invest some or all of the capital needed to build new production facilities to produce our products. In return, we expect to share in profits anticipated to be realized from the sale of these products.

Since the third quarter of 2013, downstream processing of products manufactured at the Clinton Facility had been performed at a finishing facility in Galva, Iowa ("Galva Facility"), which is operated by our long-term partner, a wholly owned subsidiary of American Natural Processors, Inc. ("ANP") ("Clinton/Galva Facilities"). We and the wholly owned subsidiary of ANP entered a Termination Agreement on December 11, 2015 terminating the contract for services at the Galva Facility as of December 31, 2015. Despite the termination we expect to continue to use the Galva Facility or another ANP-affiliated facility for some downstream processing.

Due to the termination of the contracts relating to the Clinton/Galva Facilities, customers that previously had received our products from the Clinton/Galva Facilities may need to qualify our products that are produced at the Solazyme Bunge JV production facility. A failure by the products manufactured at the Solazyme Bunge JV to qualify or otherwise meet the requirements of our customers would adversely affect our business.

There can be no assurance that a sufficient number of other sugar or other feedstock mill owners will accept the opportunity to partner with us for the production of our microalgae-based products. Reluctance on the part of mill owners may be caused, for example, by their failure to understand our technology or product opportunities or their belief that greater economic benefits can be achieved from partnering with others. Mill owners may also be reluctant or unable to obtain needed capital; alternatively, if mill owners are able to obtain debt financing, we may be required to provide a guarantee. Limitations in the credit markets, such as those experienced in the most recent economic downturn or historically in developing nations as a result of government monetary policies designed in response to very high rates of inflation, would impede or prevent this kind of financing and could adversely affect our ability to develop the production capacity needed to allow us to grow our business. Mill owners may also be limited by existing contractual obligations with other third parties, liability, health and safety concerns and additional maintenance, training, operating and other ongoing expenses.

Even if additional feedstock partners are willing to co-locate our production at their mills, they may do so only on economic terms that place more of the cost, or confer less of the economic return, on us than we currently anticipate. If we are not successful in negotiations with mill owners, our cost of securing additional manufacturing capacity may be higher than

anticipated in terms of up-front costs, capital expenditure or lost future returns, and we may not gain the manufacturing capacity that we need to grow our business.

Our pursuit of new product opportunities may not be technologically feasible or cost effective, which would limit our ability to expand our product line and sources of revenues.

We have committed, and intend to continue to commit, substantial resources, alone or with collaboration partners, to the development and analysis of new oils and other microalgae-based products by applying classical and recombinant technology to our microalgae strains. There is no guarantee that we will be successful in creating new oil profiles, or other microalgae-based products, that we, our customers, our partners or their customers desire. There are significant technological hurdles in successfully applying recombinant and other technology to microalgae, and if we are unsuccessful at developing microalgae strains that produce desirable oils and other microalgae-based products, the number and size of the markets we will be able to address will be limited, our expected profit margins could be reduced and the potential profitability of our business could be compromised.

The successful development of our business depends on our ability to efficiently and cost-effectively produce microalgae-based products at large commercial scale.

Two of the significant drivers of our production costs are the level of productivity and conversion yield of our microalgae strains. For example, with respect to oil, productivity is principally a function of the amount of oil that can be obtained from a given volume over a particular time period. Conversion yield refers to the amount of the desired oil that can be produced from a fixed amount of feedstock. We may not be able to meet our currently expected production cost profile as we ramp up large commercial manufacturing facilities. If we cannot do so, our business could be materially and adversely affected.

Production of both current and future oils and other microalgae-based products will require that our technology and processes be scalable from laboratory, pilot and demonstration projects to large commercial-scale production. We have limited experience constructing, ramping up or managing large, commercial-scale manufacturing facilities. We may not have identified all of the factors that could affect our manufacturing processes. Our technology may not perform as expected when applied at large commercial scale, or we may encounter operational challenges for which we are unable to identify a workable solution. For example, contamination in the production process, equipment failure or accidents, problems with consistent and reliable plant utilities, human error, issues arising from process modifications to reduce costs and adjust product specifications, and other similar challenges could decrease process efficiency, create delays and increase our costs. To date we have employed our technology using fermenters with a capacity of up to approximately 625,000 liters. However, we still need to demonstrate that we can reach our target cost structure, including the achievement of target yields and productivities at approximately 625,000 liter scale in Brazil. We may not be able to scale up our production in a timely manner, on commercially reasonable terms, or at all. If we are unable to manufacture products at a large commercial scale, our ability to commercialize our technology will be adversely affected, and, with respect to any products that we do bring to market, we may not be able to achieve and maintain an acceptable production cost profile, which would adversely affect our ability to reach, maintain and increase the profitability of our business.

We rely in part on third parties for the production and processing of our products. If these parties do not produce and process our products at a satisfactory quality, in a timely manner, in sufficient quantities and at an acceptable cost, our development and commercialization efforts could be delayed or otherwise negatively impacted.

Other than our Peoria Facility, we do not wholly own facilities that can produce and process our products other than at small scale. As such, we rely, and we expect to continue to rely, at least partially, on third parties (including partners and contract manufacturers) for the production and processing of our products. We currently have only one manufacturing arrangement for large-scale commercial fermentation: an agreement for the manufacture of certain products by the Solazyme Bunge JV pursuant to a joint venture arrangement. We also have the ability to do smaller-scale commercial fermentation at our Peoria facility.

In addition, we have manufacturing agreements relating to other aspects of our production process. Our current and anticipated future dependence upon our partners and contract manufacturers for the production and processing of our products may adversely affect our ability to develop products on a timely and competitive basis. The failure of any of our counterparties, including the Solazyme Bunge JV, to provide acceptable products could delay the development and commercialization of our products. We or our partners will need to enter into additional agreements for the commercial development, manufacturing and sale of our products. There can be no assurance that we or our partners can do so on favorable terms, if at all. Even if we reach agreements with manufacturing partners to produce and process our products, initially the partners will be unfamiliar with our technology and production processes. We cannot be sure that the partners will have or develop the operational expertise needed to run the equipment and processes required to manufacture our products. Further, we may have limited control over the amount or timing of resources that any partner is able or willing to devote to production and processing of our products.

To date, our products have been produced and processed in quantities sufficient for our development work and initial commercial sales. Even if there is demand for our products at commercial scale, we or our partners may not be able to successfully increase the production capacity for any of our products in a timely or economic manner or at all. In addition, to the extent we are relying on contract manufacturers to produce and process our products, we cannot be sure that such contract manufacturers will have capacity available when we need their services, that they will be willing to dedicate a portion of their production and/or processing capacity to our products or that we will be able to reach acceptable price and other terms with them for the provision of their production and/or processing services. If we, our partners or our contract manufacturers are unable to increase the production capacity for a product when and as needed, the commercial launch of that product may be delayed, or there may be a shortage of supply, which could limit sales, cause us to lose customers and sales opportunities and impair the growth of our business.

In addition, if a facility or the equipment in a facility that produces and/or processes our products is significantly damaged, destroyed or otherwise becomes unavailable, we or our partners may be unable to replace the manufacturing capacity quickly or cost effectively. The inability to enter into manufacturing agreements, the damage or destruction of a facility upon which we or our partners rely for manufacturing or any other delays in obtaining supply would delay or prevent us and/or our partners from further developing and commercializing our products.

We may experience significant delays and/or cost overruns in financing, designing, constructing and ramping up large commercial manufacturing facilities, which could result in harm to our business and prospects.

In order to meet our financial requirements for manufacturing facilities, we may have to raise additional funds and may be unable to do so in a timely manner, in sufficient amounts and on terms that are favorable to us, if at all. If we fail to raise sufficient funds, our ability to ramp up the Solazyme Bunge JV production facility or construct additional manufacturing facilities could be significantly limited. If this happens, we may be forced to delay the commercialization of our products and we will not be able to successfully execute our business plan, which would harm our business.

Manufacturing operations have begun at the Solazyme Bunge JV production facility adjacent to Bunge's Moema sugarcane mill in Brazil. The first products from the Solazyme Bunge JV production facility were produced in the second quarter of 2014, and manufacturing operations at the facility are in the process of being optimized and ramped up. We do not expect the facility to reach target nameplate capacity in the near term as the Solazyme Bunge JV continues to optimize manufacturing operations and focuses production on high margin products, and additional capital expenditures may be required to reach nameplate capacity depending on the product mix produced at the Solazyme Bunge JV production facility. Under the joint venture agreements, Bunge has agreed to provide feedstock as well as utility services to the Solazyme Bunge JV production facility. The production facility has experienced, and may continue to experience, intermittent supply of power and steam from Bunge. Bunge and the Solazyme Bunge JV have completed a number of power and steam improvement projects, including the construction of an electrical grid tie-in and the tie-in and activation of a second steam boiler. The Solazyme Bunge JV continues to evaluate the performance of these projects and may take additional actions in the future to further improve power and steam reliability, if necessary. Without consistent and reliable supplies of power and steam to the production facility, production yields will be lower, the ramp up and optimization of the Solazyme Bunge JV production facility will be delayed, our costs will increase and our business and results of operations will be adversely affected.

In February 2013, the Solazyme Bunge JV entered into a loan agreement with the Brazilian Development Bank ("BNDES") ("JV BNDES Loan") for project financing. Funds borrowed under the loan agreement have supported the production facility in Brazil, including a portion of the construction costs of the facility. In April 2016, we replaced the letter of credit issued by HSBC Bank, USA, National Association ("HSBC") in connection with the JV BNDES Loan with a standby letter of credit issued by Silicon Valley Bank ("SVB SLOC") in favor of Itaú Unibanco S.A. ("Itaú"). The SVB SLOC supports a bank guarantee issued by Itaú on our behalf to BNDES in connection with the JV BNDES Loan and is supported by a $12.9 million letter of credit facility we entered into with Silicon Valley Bank in June 2016 ("SVB Facility").

In addition, we may be required to provide a corporate guarantee of a portion of the JV BNDES Loan (in an amount that, when added to the amount supported by our bank guarantee, does not exceed our ownership percentage in the Solazyme Bunge JV). Negotiating the terms of the corporate guarantee documentation may take longer than anticipated and may contain terms that are not favorable to us. The Solazyme Bunge JV may in the future seek additional financing and may not be able to raise sufficient additional funds on favorable terms, if at all. If the Solazyme Bunge JV is unable to secure additional financing, we will be required to fund our portion of the Solazyme Bunge JV's capital requirements either from existing sources or seek additional financing. The acquisition of the facility site by the Solazyme Bunge JV from Bunge has been completed. The purchase of any additional land by the Solazyme Bunge JV would be complex, subject to multiple approvals of governmental authorities and take time to complete.

We will need to construct, or otherwise secure access to, and fund, additional capacity significantly greater than what we currently have as we continue to commercialize our products. Some of our customers may ultimately require that we acquire access to additional production facilities in order to diversify our manufacturing base. We expect to bring online additional facilities in the future. Although we intend to enter into arrangements with third parties to meet our capacity targets, it is possible that we will need to construct our own facility or facilities to meet a portion or all of these targets. We have limited experience in the construction of commercial production facilities and, if we decide to construct our own facility, we will need to secure necessary funding, complete design and other plans needed for the construction of such facility and secure the requisite permits, licenses and other governmental approvals, and we may not be successful in doing so. The construction of any such facility would have to be completed on a timely basis and within an acceptable budget. In addition, there may be delays related to the acquisition of facility sites, which could delay the development and commercialization of our products, as well as delays in deliveries of materials for the construction of such manufacturing facilities in more remote locations. Any facility, whether owned by a third party or by us, must perform as designed once it is operational. If we encounter significant delays, cost overruns, engineering or utility problems, equipment damage, accidents, equipment supply constraints or other serious challenges in bringing any of these facilities online, we may be unable to meet our production goals in the time frame we have planned. In addition, we have limited experience in the management of manufacturing operations at large scale. We may not be successful in producing the amount and quality of oil or other microalgae-based products we anticipate in the facilities and our results of operations may suffer as a result. We have limited experience producing our products at commercial scale, and we will not succeed if we cannot maintain or decrease our production costs and effectively scale our technology and manufacturing processes.

We face financial risk associated with ramping up production to reduce our per-unit production costs. To reduce per-unit production costs, we must increase production to achieve economies of scale. However, if we do not sell production output in a timely manner or in sufficient volumes at sufficient prices, our investment in production will harm our cash position and generate losses. Due to decreases in the prices of petroleum and certain plant oils, on which products competitive with our own depend, we have determined not to manufacture certain of our products because the production and sale of such products at a loss would adversely affect our business. Therefore, we expect the time required to ramp up the Solazyme Bunge JV production facility and to achieve positive cash flows at such facility will be more than we previously anticipated. Further delays would materially adversely affect our business.

Our transition to a food, nutrition and specialty ingredients company may not go as planned.

We recently changed our name from Solazyme, Inc. to TerraVia Holdings, Inc and agreed to sell Algenist, our skin care business, to a third party. We are focusing on the commercialization of food ingredients, consumer food brands, animal nutrition and specialty personal care ingredients. In connection with this transition, we plan to reallocate capital and management attention away from activities in industrial products, including fuels, chemicals and oil field services, and we are currently seeking strategic alternatives with respect to these businesses. We may not succeed in finding a strategic alternative that we believe appropriately values these businesses. We and our management may spend more resources than anticipated in evaluating strategic alternatives or continuing these businesses, which could negatively impact our overall business. Moreover, we may be unable to consummate the closing of our sale of Algenist, and the minority interest in the Algenist business we expect to retain following the closing of the sale may not be successful and may lose some or all of its value.

In addition, we have announced the appointment of a new chief executive officer, effective upon the commencement of his employment with us. Concurrent with the new chief executive officer's commencement of employment, our current chief executive officer will cease to be our chief executive officer and will become our executive chairman of the board. The transition to a new chief executive officer may require more management and board attention than we anticipate, which could distract our management team and have a negative impact on our business results.

If we fail to maintain and successfully manage our existing, or enter into new, strategic collaborations, we may not be able to develop and commercialize many of our products and achieve or sustain profitability.

Our ability to enter into, maintain and manage collaborations in our target markets is fundamental to the success of our business. We currently have joint venture, research and development, supply and/or distribution agreements with various strategic partners. We currently rely on our partners, in part, for manufacturing and sales or marketing services and intend to continue to do so for the foreseeable future, and we intend to enter into other strategic collaborations to produce, market and sell other products we develop. However, we may not be successful in entering into collaborative arrangements with third parties for the production and sale and marketing of other products. Any failure to enter into collaborative arrangements on favorable terms could delay or hinder our ability to develop and commercialize our products and could increase our costs of development and commercialization.

In the food, animal nutrition, fuels and chemicals markets, we have entered into a joint venture arrangement with Bunge that is focused on the manufacture of products in Brazil and development agreements with various other partners. In addition, we have entered into a commercial supply agreement with Unilever. In the skin and personal care market, we have entered into arrangements with certain affiliates of Sephora S.A. ("Sephora"), QVC, Inc. and others. There can be no guarantee that we can successfully manage these strategic collaborations. Under our agreement with Sephora, we bear a significant portion of the costs and risk of marketing the products, but do not exercise sole control of marketing strategy. In some cases, we will need to meet certain milestones to continue our activities with these partners. Moreover, the exclusivity provisions of certain strategic arrangements limit our ability to otherwise commercialize our products.

Pursuant to the agreements listed above and similar arrangements that we may enter into in the future, we may have limited or no control over the amount or timing of resources that any partner is able or willing to devote to our products or collaborative efforts. Any of our partners may fail to perform their obligations as expected. These partners may breach or terminate their agreements with us or otherwise fail to conduct their collaborative activities successfully and in a timely manner. Further, our partners may not develop products arising out of our arrangements or devote sufficient resources to the development, manufacture, marketing, or sale of our products. Dependence on collaborative arrangements will also subject us to other risks, including:

- we may be required to relinquish important rights, including intellectual property, marketing and distribution rights;
- we may disagree with our partners as to rights to intellectual property we develop, or their research programs or commercialization activities;
- we may have lower revenues than if we were to market and distribute such products ourselves;
- a partner could separately develop and market a competing product either independently or in collaboration with others, including our competitors;
- a partner could divest assets that are critical to our or our joint venture's operations to a third party that is less willing to cooperate with us or is less incentivized or able to manage such assets in a way that helps us achieve our operational and financial goals;
- our partners could become unable or less willing to expend their resources on research and development, commercialization efforts or the maintenance or supply of production services due to general market conditions, their financial condition or other circumstances beyond our control;
- we may be unable to manage multiple simultaneous partnerships or collaborations; and
- our partners may operate in countries where their operations could be adversely affected by changes in the local regulatory environment or by political unrest.

Moreover, disagreements with a partner or former partner could develop, and any conflict with a partner or former partner could reduce our ability to enter into future collaboration agreements and negatively impact our relationships with one or more existing partners. If any of these events occurs, or if we fail to maintain our agreements with our partners, we may not be able to commercialize our existing and potential products, grow our business or generate sufficient revenues to support our operations. In addition, disagreements with a partner or former partner could result in disputes or litigation. Formal dispute resolution and litigation can require substantial time and resources, and the resolution of disputes and litigation may result in settlements or judgments that have a materially adverse impact on our results of operations or our financial condition. We are currently engaged in legal proceedings with our former partner Roquette Frères, S.A. For additional information regarding the Roquette proceedings, see Note 15 - Commitments and Contingencies of the notes to the unaudited interim condensed consolidated financial statements.

Additionally, our business could be negatively impacted if any of our partners undergoes a change of control or were to otherwise assign the rights or obligations under any of our agreements to a competitor of ours or to a third party who is not willing to work with us on the same terms or commit the same resources as the current partner.

Our relationship with our strategic partner Bunge may not prove successful.

We have entered into a joint venture with Bunge that is focused on the production of certain microalgae-based products in Brazil. In connection with the establishment of the Solazyme Bunge JV, we entered into a development agreement and other agreements with Bunge and the Solazyme Bunge JV. Since originally establishing the Solazyme Bunge JV, we have expanded the products and fields in which the joint venture is operating.

Our ability to generate value from the Solazyme Bunge JV depends on, among other things, our ability to work cooperatively with Bunge and the Solazyme Bunge JV for the commercialization of the Solazyme Bunge JV's products. We may not be able to do so. For example, under the joint venture agreements, Bunge has agreed to provide feedstock as well as utility services to the Solazyme Bunge JV production facility.

In addition, Bunge has announced that it is actively pursuing strategic alternatives for its Brazilian sugarcane business, which could involve the divestment, in whole or in part, of the assets of such business. While a new controlling entity would remain subject to the terms of the feedstock and utility supply agreements, that entity may be less willing to cooperate with us or the Solazyme Bunge JV, which may adversely affect the development and commercialization of the Solazyme Bunge JV's products.

We and Bunge each provide various administrative services to the Solazyme Bunge JV, and Bunge also provides working capital to the Solazyme Bunge JV through a revolving loan facility. Bunge does not have previous experience working with our technology, and we cannot be sure that the Solazyme Bunge JV will be successful in commercializing its products. In addition, there may be delays or cost overruns in connection with the ramp up and optimization of the Solazyme Bunge JV production facility. There may also be delays in our negotiation of the corporate guarantee in connection with the JV BNDES Loan. In addition, we will be required to maintain the required license, granted by the Sao Paulo State Environmental Department, to operate the production facility. Any negative event with respect to these issues would delay the development and commercialization of the Solazyme Bunge JV products. Furthermore, the agreements governing our partnership are complex and cover a range of future activities, and disputes may arise between us and Bunge that could delay completion of the Solazyme Bunge JV facility and/or the expansion of the Solazyme Bunge JV's capacity and the development and commercialization of the Solazyme Bunge JV's products or cause the dissolution of the Solazyme Bunge JV.

Our joint venture with Roquette has been dissolved. We are currently in litigation with Roquette and we may have other disputes with Roquette related to the joint venture's business.

In 2010, we entered into a 50/50 joint venture with Roquette Frères, S.A. ("Roquette"). As part of this relationship, we and Roquette formed Solazyme Roquette Nutritionals, LLC ("SRN") through which both we and Roquette agreed to pursue certain opportunities in microalgae-based products for the food, nutraceuticals and animal feed markets. In June 2013, we and Roquette agreed to dissolve SRN and on July 18, 2013, SRN was dissolved. As a result of the dissolution, the joint venture and operating agreement between us and Roquette, and the license agreement, whereby we licensed to SRN certain of our intellectual property, automatically terminated.

We and Roquette engaged in an arbitration proceeding concerning the proper assignment of the intellectual property of SRN. In February 2015 the arbitration panel awarded all such intellectual property to us, and this award was confirmed by the U.S. District Court for the District of Delaware in December 2015. In addition, Roquette commenced two separate actions in the U.S. District Court for the District of Delaware for declarations that, among other things, the arbitrators exceeded their authority by failing to render a timely arbitration award and as a result any orders or awards issued by the arbitrators are void. Summary judgment in these matters requested by Roquette was denied by the U.S. District Court for the District of Delaware in December 2015. We have counterclaimed for damages for misappropriation of trade secrets, misuse of confidential information and breach of contract. In turn Roquette has counterclaimed that we have misused certain Roquette trade secrets. The proceedings are ongoing. See Note 15 - Commitments and Contingencies of the notes to the unaudited interim condensed consolidated financial statements for more information regarding our proceedings with Roquette. We cannot be sure that other disputes will not arise between us and Roquette related to the joint venture's business. Such disagreements and disputes are costly, time-consuming to resolve and distracting to our management.

Disputes regarding our intellectual property rights, and the rights of others (including Roquette) to manufacture and sell the products included in the SRN joint venture could delay or negatively impact our commercialization of products in the markets SRN was targeting. Any such disputes could be costly, time-consuming to resolve and distracting to our management. In addition, if our commercialization in these markets is delayed or unsuccessful, our financial results could be negatively impacted.

We cannot be sure that our products will meet necessary standards or be approved or accepted by customers in our target markets.

If we are unable to convince our potential customers or end users of our products that we are a reliable supplier, that our products are comparable or superior to the products that they currently use, or that the use of our products is otherwise beneficial to them, we will not be successful in entering our target markets and our business will be adversely affected.

In the food and nutrition market and in the animal nutrition market, our food ingredients and products will compete with oils and other food ingredients currently in use. Potential customers may not perceive a benefit to microalgae-based ingredients

as compared to existing ingredients or may be otherwise unwilling to adopt their use. If consumer packaged goods companies do not accept our food ingredients as ingredients for their widely distributed finished products, or if end customers are unwilling to purchase finished products made using our products, we will not be successful in competing in the nutrition market and our business will be adversely affected. Customers in the nutrition market also may require lengthy and complex qualification procedures with respect to our products, our manufacturing capabilities, regulatory issues and other matters. Likewise, in the animal nutrition market, if customers are not willing to integrate our products into their animal nutrition products, our business will be adversely affected.

In the skin and personal care market, our branded products are marketed directly to potential consumers, but we cannot be sure that consumers will continue to be attracted to our brands, be attracted to our new brands or products, or purchase our products on an ongoing basis. As a result, our branded products may not be successful, distribution partners may decide to discontinue marketing our products and our business will be adversely affected.

In the chemicals market, the potential customers for our or the Solazyme Bunge JV's products are generally companies that have well-developed manufacturing processes and arrangements with suppliers for the chemical components of their products and may resist changing these processes and components. These potential customers frequently impose lengthy and complex product qualification procedures on their suppliers, influenced by consumer preference, manufacturing considerations, supplier operating history, regulatory issues, product liability and other factors, many of which are unknown to, or not well understood by, us. Satisfying these processes may take many months or years.

Although we produce products for the fuels market that comply with industry specifications, potential fuels customers may be reluctant to adopt new products. In addition, our fuels may need to satisfy product certification requirements of equipment manufacturers. For example, diesel engine manufacturers may need to certify that the use of diesel fuels produced from our oils in their equipment will not invalidate product warranties.

In the oil field services market, our Encapso ® product competes with incumbent drilling lubricants and other specialty lubricants. Potential customers may be reluctant to adopt an algae-based product because of their unfamiliarity with our technology. Our Encapso ® product has been subjected only to a limited number of on-site drilling trials, and certain customers may require further data and operating history prior to committing to purchase.

We have entered into a limited number of binding, definitive commercial supply agreements that contain minimum volume commitments. We also periodically enter into non-binding letters of intent with third parties regarding purchase of our products, but these agreements do not unconditionally obligate the other party to purchase any quantities of any products at this time. There can be no assurance that non-binding letters of intent will lead to unconditional definitive agreements to purchase our products.

We have limited experience in structuring arrangements with customers for the purchase of our microalgae-based products, and we may not be successful in this essential aspect of our business.

We expect that our customers will include large companies that sell food products, nutrition products, skin and personal care products and chemical products, as well as large users of oils for fuels and lubricants for oil field operations and other applications. Because we began commercializing our skin and personal care products in the last few years, have only recently begun to commercialize lubricants for oil field operations and our own food ingredient products, and are still in the process of developing our products for the food, nutrition and skin and personal care, fuels and chemicals, oil field services and other markets, we have limited experience operating in our customers' industries and interacting with the customers that we intend to target. Developing the necessary expertise may take longer than we expect and will require that we expand and improve our sales and marketing capability, which could be costly. These activities could delay our ability to capitalize on the opportunities that we believe our technology and products present, and may prevent us from successfully commercializing our products. Further, we ultimately aim to sell large amounts of our products, and this will require that we effectively negotiate and manage contracts for these purchase and sale relationships. The companies with which we aim to have arrangements are generally much larger than we are and have substantially longer operating histories and more experience in their industries than we have. As a result, we may not succeed in establishing relationships with these companies and, if we do, we may not be effective in negotiating or managing the terms of such relationships, which could adversely affect our future results of operations.

We may be subject to product liability claims and other claims of our customers, partners and third parties.

The design, development, production and sale of our products involve an inherent risk of product liability claims and the associated adverse publicity. Because some of our ultimate products in each of our target markets are used by consumers, and because use of those ultimate products may cause injury to those consumers and damage to property, we are subject to a risk of claims for such injuries and damages. In addition, we may be named directly in product liability suits relating to our products or third-party products integrating our products, even for defects resulting from errors of our partners, contract

manufacturers or other third parties working with our products. These claims could be brought by various parties, including customers who are purchasing products directly from us or other users who purchase products from our customers or partners. We could also be named as co-parties in product liability suits that are brought against manufacturing partners that produce our products.

In addition, our customers, partners and third parties may bring suits against us alleging damages for the failure of our products to meet stated claims, specifications or other requirements. Any such suits, even if not successful, could be costly, disrupt the attention of our management and damage our negotiations with other partners and/or customers. Although we often seek to limit our product liability in our contracts, such limits may not be enforceable or may be subject to exceptions. Our current product liability and umbrella insurance for our business may be inadequate to cover all potential liability claims. Insurance coverage is expensive and may be difficult to obtain. Also, insurance coverage may not be available in the future on acceptable terms and may not be sufficient to cover potential claims. We cannot be sure that our contract manufacturers or manufacturing partners who produce our ultimate products will have adequate insurance coverage to cover against potential claims. If we experience a large insured loss, it may exceed our coverage limits, or our insurance carrier may decline to further cover us or may raise our insurance rates to unacceptable levels, any of which could impair our financial position and potentially cause us to go out of business.

We will face risks associated with our international business in developing countries and elsewhere.

For the foreseeable future, our business plan will likely subject us to risks associated with essential manufacturing, sales and operations in developing countries. We have limited experience to date manufacturing and selling internationally and such expansion will require us to make significant expenditures, including the hiring of local employees and establishing facilities, in advance of generating any revenue. The economies of many of the countries in which we or our joint ventures operate or will operate have been characterized by frequent and occasionally extensive government intervention and unstable economic cycles.

In addition, in Brazil, where the Solazyme Bunge JV is located, there are restrictions on the foreign ownership of land, which may affect the Solazyme Bunge JV's ownership rights in the facility site or in any additional land purchased.

International business operations are subject to local legal, political, regulatory and social requirements and economic conditions and our business, financial performance and prospects may be adversely affected by, among others, the following factors:

- political, economic, diplomatic or social instability;
- land reform movements;
- tariffs, export or import restrictions, restrictions on remittances abroad or repatriation of profits, duties or taxes that limit our ability to move our products out of these countries or interfere with the import of essential materials into these countries;
- inflation, changing interest rates and exchange controls;
- tax burden and policies;
- delays or failures in securing licenses, permits or other governmental approvals necessary to build and operate facilities and use our microalgae strains to produce products;
- the imposition of limitations on products or processes and the production or sale of those products or processes;
- uncertainties relating to foreign laws, including labor laws, regulations and restrictions, and legal proceedings;
- foreign ownership rules and changes in regard thereto;
- an inability, or reduced ability, to protect our intellectual property, including any effect of compulsory licensing imposed by government action;
- successful compliance with U.S. and foreign laws that regulate the conduct of business abroad, including the Foreign Corrupt Practices Act;
- insufficient investment in developing countries in public infrastructure, including transportation infrastructure, and disruption of transportation and logistics services; and
- difficulties and costs of staffing and managing foreign operations.

These and other factors could have a material adverse impact on our results of operations and financial condition.

Our international operations may expose us to the risk of fluctuation in currency exchange rates and rates of foreign inflation, which could adversely affect our results of operations.

We currently incur some costs and expenses in Euros and Brazilian Reals and expect in the future to incur additional expenses in these and other foreign currencies, and also derive a portion of our revenues in the local currencies of customers throughout the world. As a result, our revenues and results of operations are subject to foreign exchange fluctuations, which we may not be able to manage successfully. During the past few decades, the Brazilian currency in particular has faced frequent and substantial exchange rate fluctuations in relation to the U.S. dollar and other foreign currencies. For example, the value of the Brazilian Real has fallen significantly against the U.S. dollar over the past few years. There can be no assurance that the Real or the Euro will not significantly appreciate or depreciate against the U.S. dollar in the future. We bear the risk that the rate of inflation in the foreign countries where we incur costs and expenses or the decline in value of the U.S. dollar compared to those foreign currencies will increase our costs as expressed in U.S. dollars. Future measures by foreign governments to control inflation, including interest rate adjustments, intervention in the foreign exchange market and changes to the fixed value of their currencies, may trigger increases in inflation. We may not be able to adjust the prices of our products to offset the effects of inflation on our cost structure, which could increase our costs and reduce our net operating margins. If we do not successfully manage these risks through hedging or other mechanisms, our revenues and results of operations could be adversely affected.

We may encounter difficulties managing our growth, and we will need to properly prioritize our efforts in our target markets as our business grows. If we are unable to do so, our business, financial condition and results of operations may be adversely affected.

Our business has grown rapidly. Continued growth may place a strain on our human and capital resources. If we grow too rapidly or if our headcount or other aspects of our operating structure become misaligned with our strategy, we may need to reduce headcount or other operating costs. For example, in December 2014, as part of an adjustment to our operating and expense strategy related to the ramping up of the Solazyme Bunge JV production facility, we announced the intention to decrease operating expenses through a reduction in workforce and other cost-cutting measures. See the risk factor titled “We may experience significant delays and/or cost overruns in financing, designing, constructing and ramping up large commercial manufacturing facilities, which could result in harm to our business and prospects” above for more information. In addition, in January 2016, as part of our continuing strategy to focus operations on targeted, higher-value product categories, we streamlined operations by reducing our workforce. Such reductions in workforce can have an adverse effect on our business.

Furthermore, we intend to conduct our business internationally and anticipate business operations in the United States, Europe, Latin America and elsewhere. These diversified, global operations place increased demands on our limited resources and may require us to substantially expand the capabilities of our administrative and operational resources and will require us to attract, train, manage and retain qualified management, technicians, scientists and other personnel. As our operations expand domestically and internationally, we will need to continue to manage multiple locations and additional relationships with various customers, partners, suppliers and other third parties across several product categories and markets.

Our business has taken place across several target markets: food and nutrition, skin and personal care, fuels and chemicals, and oil field services. We will be required to prioritize our limited financial and managerial resources as we pursue particular development and commercialization efforts in each target market. Any resources we expend on one or more of these efforts could be at the expense of other potentially profitable opportunities. If we focus our efforts and resources on one or more of these markets and they do not lead to commercially viable products, our revenues, financial condition and results of operations could be adversely affected. Furthermore, as our operations continue to grow, the simultaneous management of development, production and commercialization across our target markets will become increasingly complex and may result in less than optimal allocation of management and other administrative resources, increase our operating expenses and harm our operating results.

Our ability to effectively manage our operations, growth and various projects across our target markets will require us to make additional investments in our infrastructure to continue to improve our operational, financial and management controls and our reporting systems and procedures and to attract and retain sufficient numbers of talented employees, which we may be unable to do effectively. We may be unable to successfully manage our expenses in the future, which may negatively impact our gross margins or operating margins in any particular quarter.

In addition, we may not be able to improve our management information and control systems, including our internal control over financial reporting, to a level necessary to manage our growth and we may discover deficiencies in existing systems and controls that we may not be able to remediate in an efficient or timely manner.

We are involved, and may become involved in the future, in legal proceedings that, if adversely adjudicated or settled, could adversely affect our financial results.

We, and certain of our officers and directors, are involved, and may be involved in the future, in legal proceedings and claims arising in the course of our business. Such matters are subject to many uncertainties and there can be no assurance that such legal proceedings will not have a material adverse effect on our business, results of operations, financial position or cash flows. See Note 15 - Commitments and Contingencies of the notes to the unaudited interim condensed consolidated financial statements of this report for a description of the material legal proceedings in which we are currently engaged.

We cannot predict the outcome of any legal proceeding in which we are engaged. Moreover, any conclusion of legal proceedings in a manner adverse to us could have an adverse effect on our financial condition and business. Even if we are successful in litigation, we could incur substantial costs, suffer a significant adverse impact on our reputation and divert management's attention and resources from other priorities, including the execution of business plans and strategies that are important to our ability to grow our business, any of which could have an adverse effect on our business. Legal proceedings may result in significant legal expenses, settlement costs or damage awards that are not covered by, or exceed the limits of, our liability insurance, which could adversely impact our financial condition, results of operations or cash flow.

Our success depends in part on recruiting and retaining key personnel and, if we fail to do so, it may be more difficult for us to execute our business strategy. We are currently a small organization and will need to hire additional personnel to execute our business strategy successfully.

Our success depends on our continued ability to attract, retain and motivate highly qualified management, business development, manufacturing and scientific personnel and directors, and on our ability to develop and maintain important relationships with leading academic institutions and scientists. We are highly dependent upon a number of key members of our senior management, including manufacturing, business development and scientific personnel, and on our directors. If any of such persons left, our business could be harmed. All of our employees and directors are at-will and may resign at any time. The loss of the services of one or more of our key employees, or directors could delay or have an impact on the successful commercialization of our products. We do not maintain any key man insurance. Competition for qualified personnel in the biotechnology field is intense, particularly in the San Francisco Bay Area. We may not be able to attract and retain qualified personnel on acceptable terms given the competition for such personnel. In addition, the restructurings that we implemented in December 2014 and January 2016 could have an adverse impact on our ability to retain and recruit qualified personnel. If we are unsuccessful in our recruitment efforts, we may be unable to execute our strategy.

We may not be able to meet applicable regulatory requirements for the sale of our microalgae-based products and the operation of production facilities, and, even if requirements are met, complying on an ongoing basis with the numerous regulatory requirements applicable to our various product categories and facilities will be time-consuming and costly.

Our chemical products may be subject to government regulation in our target markets. In the United States, the EPA administers the Toxic Substances Control Act ("TSCA"), which regulates the commercial registration, distribution, and use of chemicals. TSCA will require us to comply with the Microbial Commercial Activity Notice ("MCAN") process to manufacture and distribute products made from our recombinant microalgae strains. An MCAN is not required for non-recombinant strains. To date, we have filed MCANs for certain of our recombinant microalgae strains, all of which have been dropped from review. Our subsequent filing of Notices of Commencement (NOC) relating to previously filed MCANs allows us to commercially use these strains. We expect to file additional MCANs in the future.

Before we can manufacture or distribute significant volumes of a chemical, we need to determine whether that chemical is listed in the TSCA inventory. If the substance is listed, then manufacture or distribution can commence immediately. If not, then a pre-manufacture notice ("PMN") must be filed with the EPA for a review period of up to 90 days excluding extensions. We have filed PMNs for certain of our products and expect to file additional PMNs in the future. Some of the products we produce or plan to produce are already on the TSCA inventory due to our successful PMN submissions and filed NOCs. Others are not yet listed. We may not be able to expediently receive approval from the EPA to list the chemicals we would like to make on the TSCA inventory, resulting in delays or significant increases in testing requirements. A similar program exists in the European Union, called REACH (Registration, Evaluation, Authorization, and Restriction of Chemical Substances). We are required to register some of our products with the European Commission, and this process could cause delays or significant costs. We have determined that some of our algae oils are exempt from REACH registration requirements. To the extent that other geographies, such as Brazil, may rely on the TSCA or REACH for chemical registration in their geographies, delays with the U.S. or European authorities may subsequently delay entry into these markets as well. Furthermore, other geographies may have their own chemical inventory requirements, which may delay entry into these markets, irrespective of U.S. or European approval.

Our food and nutrition products are subject to regulation by various government agencies, including the U.S. Food and Drug Administration ("FDA"), state and local agencies and similar agencies outside the United States. In the U.S., food ingredients are regulated either as food additives or as substances generally recognized as safe, or GRAS. A GRAS self-determination can be made with respect to a substance by its manufacturer upon the receipt of an opinion from a panel of qualified experts who determine that the substance is GRAS for its intended conditions of use. A GRAS Notice for one algae oil was submitted to the FDA in June 2011, and a "no questions" letter was received from the FDA in June 2012. A GRAS Notice for each of whole algae flour and whole algae protein was submitted to the FDA, and a "no questions" letter was received from the FDA in 2013 for whole algae flour, in 2014 for whole algae protein and in 2015 for our second algae oil, an oleic algae oil. If the FDA were to disagree with the conclusions in future GRAS Notices, they could ask that the products be voluntarily withdrawn from the market or could initiate legal action to halt their sale. Such actions by the FDA could have an adverse effect on our business, financial condition, and results of our operations. Food ingredients that are not GRAS are regulated as food additives and require FDA approval prior to commercialization. The food additive petition process is generally expensive and time consuming, with approval, if secured, taking years. In Brazil, we submitted applications to the Brazilian Health Surveillance Agency (ANVISA) for approval of various food products. We received food approval with no restrictions for our whole algae flour in July 2015. In Canada, we received a Letter of No Objection for whole algae flour in February 2016. Other products may or may not be approved in the future. Any significant delay or disapproval of our food products by ANVISA, Health Canada or other government agencies in these or other countries would adversely affect our food and nutrition business in these and other countries.

The sale and/or use of diesel and jet fuels produced from our oils are subject to regulation by various government agencies, including the Environmental Protection Agency ("EPA") and the California Air Resources Board in the United States. To date, we have registered our Soladiesel ® RD and Soladiesel ® BD fuel in the United States. We or our refining or commercialization partners or customers may be required to register our fuel in the United States, with the European Commission and elsewhere before selling our products.

The sale of ingredients for use in animal feed is regulated by agencies including the FDA's Center for Veterinary Medicine ("CVM"). Regulatory requirements for suitability must be met by providing data from studies, which may cause delays and the incursion of additional costs. Any significant delay or disapproval by government agencies of our animal nutrition products would have an adverse effect on our business.

Our skin and personal care products are subject to regulation by various government agencies both within and outside the United States. Such regulations principally relate to the ingredients, labeling, packaging and marketing of our skin and personal care products.

Changes in regulatory requirements, laws and policies, or evolving interpretations of existing regulatory requirements, laws and policies, may result in increased compliance costs, delays, capital expenditures and other financial obligations that could adversely affect our business or financial results.

We expect to encounter regulations in most if not all of the countries in which we may seek to sell our products, and we cannot be sure that we will be able to obtain necessary approvals in a timely manner or at all. If our products do not meet applicable regulatory requirements in a particular country or at all, then we may not be able to commercialize them and our business will be adversely affected. The various regulatory schemes applicable to our products will continue to apply following initial approval for sale. Monitoring regulatory changes and ensuring our ongoing compliance with applicable requirements will be time-consuming and may affect our results of operations. If we fail to comply with such requirements on an ongoing basis, we may be subject to fines or other penalties, or may be prevented from selling our products, and our business may be harmed.

The construction and operation of our, our partners' or our joint ventures' production facilities are likely to require government approvals. If we are not able to obtain or maintain the necessary approvals in a timely manner or at all, our business will be adversely affected. In February 2014, the Sao Paulo State Environmental Department granted a license to operate the Solazyme Bunge JV facility, which was necessary to begin commercial production.

We may incur significant costs complying with environmental, health and safety laws and regulations, and failure to comply with these laws and regulations could expose us to significant liabilities.

We use hazardous chemicals and radioactive and biological materials in our business and are subject to a variety of federal, state, local and international laws and regulations governing, among other matters, the use, generation, manufacture, transportation, storage, handling, disposal of, and human exposure to, these materials both in the U.S. and outside the U.S., including regulation by governmental regulatory agencies, such as the Occupational Safety and Health Administration and the EPA. We have incurred, and will continue to incur, capital and operating expenditures and other costs in the ordinary course of our business in complying with these laws and regulations.

Although we have implemented safety procedures for handling and disposing of these materials and waste products in an effort to comply with these laws and regulations, we cannot be sure that our safety measures will be compliant or capable of eliminating the risk of injury or contamination from the generation, manufacturing, use, storage, transportation, handling, disposal of, and human exposure to, hazardous materials. Failure to comply with environmental, health and safety laws could subject us to liability and resulting damages. There can be no assurance that violations of environmental, health and safety laws will not occur as a result of human error, accident, equipment failure or other causes. Compliance with applicable environmental laws and regulations may be expensive, and the failure to comply with past, present, or future laws could result in the imposition of fines, regulatory oversight costs, third party property damage, product liability and personal injury claims, investigation and remediation costs, the suspension of production, or a cessation of operations, and our liability may exceed our total assets. Liability under environmental laws, such as the Comprehensive Environmental Response Compensation and Liability Act in the United States, can impose liability for the full amount of damages, without regard to comparative fault for the investigation and cleanup of contamination and impacts to human health and for damages to natural resources. Contamination at properties we own and operate, and at properties to which we send hazardous materials, may result in liability for us under environmental laws and regulations.

Our business and operations will be affected by other new environmental, health and safety laws and regulations, which may affect our research and development and manufacturing programs, and environmental laws could become more stringent over time, requiring us to change our operations, or resulting in greater compliance costs and increasing risks and penalties associated with violations, which could impair our research, development or production efforts and harm our business. The costs of complying with environmental, health and safety laws and regulations, and any claims concerning noncompliance, or liability with respect to contamination in the future could have a material adverse effect on our financial condition or operating results.

Changes in government regulations, including subsidies and economic incentives, could have a material adverse effect on demand for our products, business or results of operations.

The market for renewable fuels is heavily influenced by foreign, federal, state and local government regulations and policies. Changes to existing, or adoption of new, domestic or foreign federal, state or local legislative initiatives that impact the production, distribution, sale or import and export of renewable fuels may harm our business. For example, in 2007, the Energy Independence and Security Act ("EISA") of 2007 set targets for alternative sourced liquid transportation fuels (approximately 14 billion gallons in 2011, increasing to 36 billion gallons by 2022). Of the 2022 target amount, a minimum of 21 billion gallons must be advanced biofuels. In the U.S. and in a number of other countries, these regulations and policies have been modified in the past and may be modified again in the future. For example, in 2015, the U.S. Environmental Protection Agency (EPA) announced a reduction in the volume of total renewable fuel from the 2015 statutory target of 20.5 billion gallons to 16.3 billion gallons. The elimination of, or any additional reduction in, mandated requirements for fuel alternatives and additives to gasoline may cause demand for biofuels to decline and deter investment in the research, development or commercial adoption of renewable fuels.

In addition, the U.S. Congress has passed legislation that extends tax credits to blenders of certain renewable fuel products. However, there is no assurance that this or any other favorable legislation will remain in place. For example, the biofuel tax credit expires annually, and is therefore at risk every year for delay of approval. Any reduction in, phasing out or elimination of existing tax credits, subsidies and other incentives in the U.S. and foreign markets for renewable fuels, or any inability of our customers to access such credits, subsidies and incentives, may adversely affect demand for our fuel products and increase the overall cost of commercialization of our renewable fuels, which would adversely affect our business.

Furthermore, market uncertainty regarding future policies may also affect our ability to develop new renewable products, license our technologies to third parties and sell products to end customers. Any inability to address these requirements and any regulatory or policy changes could have a material adverse effect on our business, financial condition and results of operations.

Conversely, government programs could increase investment and competition in the markets for our products. For example, various governments have announced a number of spending programs focused on the development of clean technology, including alternatives to petroleum-based fuels and materials and the reduction of greenhouse gas ("GHG") emissions, which could lead to increased funding for us or our competitors, or the rapid increase in the number of competitors within our markets.

Concerns associated with renewable fuels, including land usage, national security interests and food crop usage, are receiving legislative, industry and public attention. This could result in future legislation, regulation and/or administrative action that could adversely affect our business. When and how these requirements and any regulatory or policy changes are addressed could have a material adverse effect on our business, financial condition and results of operations.

Future government policies may adversely affect the supply of sugarcane, corn or cellulosic sugars, restricting our ability to use these feedstocks to produce our products, and negatively impact our revenues and results of operations.

We may face risks relating to the use of our targeted recombinant microalgae strains, and if we are not able to meet applicable regulatory requirements for the use of these strains or if we face material ethical, legal and social concerns about our use of targeted recombinant technology, our business could be adversely affected.

The use of microorganisms designed using targeted recombinant technology, such as some of our microalgae strains, is subject to laws and regulations in many states and countries, some of which are new and still evolving and interpreted by fact specific application. In the United States, the EPA regulates the commercial use of microorganisms designed using targeted recombinant technology as well as potential products derived from them.

We expect to encounter regulations of microorganisms designed using targeted recombinant technology in most if not all of the countries in which we may seek to establish manufacturing operations, and the scope and nature of these regulations will likely be different from country to country. For example, in the U.S., when used in an industrial process, our microalgae strains designed using targeted recombinant technology may be considered new chemicals under the TSCA, administered by the EPA. We will be required to comply with the EPA's process. In Brazil, microorganisms designed using targeted recombinant technology are regulated by the National Biosafety Technical Commission, or CTNBio. In March 2013, we submitted an application for approval from CTNBio to use a specific microalgae strain designed using targeted recombinant technology in a contained environment in order to use these microalgae for research and development and commercial production purposes in any facilities we establish in Brazil. We obtained approval for this application from CTNBio in October 2013, and we have since received several approvals related to additional applications we had submitted. In February 2014, CTNBio granted a CQB (Certificate of Quality in Biosafety) to the Solazyme Bunge JV facility for activities including industrial production, import and export, disposal and storage of our key production organisms. If we cannot meet the applicable requirements in countries in which we intend to produce microalgae-based products, or if it takes longer than anticipated to obtain such approvals, our business could be adversely affected.

The subject of organisms designed using targeted recombinant technology has received negative publicity, which has aroused public debate. Public attitudes about the safety and environmental hazards of, and ethical concerns over, genetic research and microorganisms designed using targeted recombinant technology could influence public acceptance of our technology and products. In addition, shifting public attitudes regarding, and potential changes to laws governing, ownership of genetic material could harm our intellectual property rights with respect to our genetic material and discourage collaborators from supporting, developing, or commercializing our products, processes and technologies. Governmental reaction to negative publicity concerning organisms designed using targeted recombinant technology could result in greater government regulation of or trade restrictions on imports of genetic research and derivative products. If we and/or our collaborators are not able to overcome the ethical, legal, and social concerns relating to the use of targeted recombinant technology, our products and processes may not be accepted or we could face increased expenses, delays or other impediments to their commercialization.

We expect to face competition for our food and nutrition, animal nutrition and skin and personal care products from other companies in these fields, many of whom have greater resources and experience than we do. If we cannot compete effectively against these companies or their products, we may not be successful in selling our products or further growing our business.

We expect that our food, nutrition, animal nutrition and skin and personal care products will compete with providers in both the specialty, mass food ingredient and animal nutrition markets. Many of these companies, such as Cargill, Incorporated, Monsanto Company, Syngenta AG and Roquette Frères, S.A., are larger than we are, have well-developed distribution systems and networks for their products and have valuable historical relationships with the potential customers and distributors we hope to serve. We may also compete with companies seeking to produce food, nutrition and animal nutrition products based on renewable oils, including DSM Food Specialties and DuPont Nutrition & Health. Our success in the development of food, nutrition and animal nutrition products will depend on our ability to effectively compete with established companies and successfully commercialize our products. We believe the primary competitive factors in the food, nutrition, animal nutrition and skin and personal care product markets are product performance, cost-in-use, sustainability, and availability of supply.

In the skin and personal care market, we expect to compete with established companies and brands with loyal customer followings. The market for skin and personal care products is characterized by strong established brands, loyal brand following and heavy brand marketing. We will compete with companies with well-known brands such as Kinerase ®, Perricone MD ®, and StriVectin ®. These companies have greater sales and marketing resources than us. We have limited experience in the skin and personal care market. We will need to continue to devote substantial resources to the marketing of our products and there can be no assurance that we will be successful.

We expect to face competition for our products in the fuels and chemicals markets from providers of products based on petroleum, plant oils and animal fats and from other companies seeking to provide alternatives to these products, many of whom have greater resources and experience than we do. If we cannot compete effectively against these companies or products, our business could be harmed and certain of our strategic alternatives could be adversely impacted.

In the chemical market, we will compete with the established providers of oils currently used in chemical products. Producers of these incumbent products include global oil companies, including those selling agricultural products such as palm oil, palm kernel oil, castor bean oil and sunflower oil, large international chemical companies and other companies specializing in specific products or essential oils. We may also compete in one or more of these markets with manufacturers of other products such as highly refined petrochemicals, synthetic polymers and other petroleum-based fluids and lubricants as well as new market entrants offering renewable products.

In the transportation fuels market, we expect to compete with independent and integrated oil refiners, large oil and gas companies and, in certain fuels markets, with other companies producing advanced biofuels. The refiners compete with us by selling conventional fuel products, and some are also pursuing hydrocarbon fuel production using non-renewable feedstocks, such as natural gas and coal, as well as production using renewable feedstocks, such as vegetable oil and biomass. We also expect to compete with companies that are developing the capacity to produce diesel and other transportation fuels from renewable resources in other ways. These include advanced biofuels companies using specific engineered enzymes that they have developed to convert cellulosic biomass, which is non-food plant material such as wood chips, corn stalks and sugarcane bagasse, into fermentable sugars and ultimately, renewable diesel and other fuels. Biodiesel companies convert vegetable oils and animal oils into diesel fuel and some are seeking to produce diesel and other transportation fuels using thermochemical methods to convert biomass into renewable fuels.

We believe the primary competitive factors in both the fuels and chemicals markets are product price, product performance, sustainability, availability of supply and compatibility of products with existing infrastructure.

The oil companies, large chemical companies and well-established agricultural products companies with whom we expect to compete are much larger than we are, have, in most cases, well-developed distribution systems and networks for their products, have valuable historical relationships with the potential customers we are seeking to serve and have much more extensive sales and marketing programs in place to promote their products. Some of our competitors may use their influence to impede the development and acceptance of our products. Our limited resources relative to many of our competitors may cause us to fail to anticipate or respond adequately to new developments and other competitive pressures. In the nascent markets for renewable fuels and chemicals, it is difficult to predict which, if any, market entrants will be successful, and we may lose market share to competitors producing new or existing renewable products. If we are unsuccessful in competing in the fuels and chemicals markets, our business could be harmed and certain of our strategic alternatives could be adversely impacted.

We expect to face competition in the oil field services market.

We expect that our Encapso ® product will compete with incumbent drilling lubricant products that are marketed by larger companies with significantly greater resources and experience. Such competitors compete vigorously on fluids performance and price. These companies have broad product and service offerings in addition to their drilling fluids. These larger companies may attempt to compete by offering discounts to customers to use multiple products and services, some of which we do not offer. We may also compete with regional companies that compete on price, performance and local relationships. Our success in this target market will depend on our ability to effectively compete with these established companies. If we are unable to do so effectively, our business could be harmed and certain of our strategic alternatives could be adversely impacted.

A decline in the price of petroleum and petroleum-based products, plant oils or other commodities may reduce demand for our products and may otherwise adversely affect our business.

We anticipate that most of our oils, and in particular those used to produce fuels, will be marketed as alternatives to corresponding products based on petroleum and plant oils. When the price of any of these oils falls, as they have recently, we may be unable to produce algae oils or other products that are cost-effective alternatives to their petroleum or plant oil-based counterparts. Declining oil prices, or the perception of a future decline in oil prices, may adversely affect the prices we can obtain from our potential customers or prevent potential customers from entering into agreements with us to buy our products. During sustained periods of lower oil prices we may be unable to sell our products, which could materially and adversely affect our operating results. For example, in part as a result of the recent drop in the prices of petroleum and certain plant oils, the ramp up of the Solazyme Bunge JV's production facility in Brazil will be slower than, and the mix of products manufactured in that facility will be different from, what we previously anticipated as production will be focused primarily on high margin products.

Petroleum prices have been extremely volatile, and this volatility is expected to persist. Lower petroleum prices over extended periods of time may change the perceptions in government and the private sector that cheaper, more readily available energy alternatives should be developed and produced. If petroleum prices remain at present levels or decline to lower levels for extended periods of time, the demand for renewable fuels could be reduced, and our business and revenue may be harmed.

Prices of plant oils have also experienced significant volatility. If prices for oils such as palm kernel were to materially decrease in the future, there may be less demand for oil alternatives, which could reduce demand for our products and harm our business. The prices of commodities that serve as food ingredients have also been volatile. To the extent that the prices of these commodities decline and remain at lower levels for extended periods of time, the demand for our food, nutrition and skin and personal care products may be reduced, and our ability to successfully compete in this market may be harmed.

Our information technology systems, processes and sites may suffer a significant breach or disruption that may adversely affect our ability to conduct our business.

Our information technology systems, some of which are dependent on services provided by third parties, provide critical data and services for internal and external users, including procurement and inventory management, transaction processing, financial, commercial and operational data, human resources management, legal and tax compliance information and other information and processes necessary to operate and manage our business. Our information technology and infrastructure may experience attacks by hackers, breaches or other failures or disruptions that could compromise our systems and the information stored there. While we have implemented security measures and disaster recovery plans designed to protect the security and continuity of our networks and critical systems, these measures may not adequately prevent adverse events such as breaches or failures from occurring or mitigate their severity if they do occur. If our information technology systems are breached, damaged or fail to function properly due to any number of causes, such as security breaches or cyber-based attacks, systems implementation difficulties, catastrophic events or power outages, and our security, contingency or disaster recovery plans do not effectively mitigate these occurrences on a timely basis, we may experience a material disruption in our ability to manage our business operations. We may also be subject to legal claims or proceedings, liability under laws that protect the privacy of personal information, potential regulatory penalties and damage to our reputation. The occurrence of any of these events may adversely impact our business, results of operations and financial condition, as well as our competitive position.

Our facilities in California are located near an earthquake fault, and an earthquake or other natural disaster or resource shortage could disrupt our operations.

Important documents and records, such as hard copies of our laboratory books and records for our products and some of our manufacturing operations, are located in our corporate headquarters in South San Francisco, California, near active earthquake zones. In the event of a natural disaster, such as an earthquake, drought or flood, or localized extended outages of critical utilities or transportation systems, we do not have a formal business continuity or disaster recovery plan, and could therefore experience a significant business interruption. In addition, California from time to time has experienced shortages of water, electric power and natural gas. Future shortages and conservation measures could disrupt our operations and could result in additional expense. Although we maintain business interruption insurance coverage, we do not maintain earthquake or flood coverage.

Risks Related to Our Intellectual Property

Our competitive position depends on our ability to effectively obtain and enforce patents related to our products, manufacturing components and manufacturing processes. If we or our licensors fail to adequately protect this intellectual property, our ability and/or our partners' ability to commercialize products could suffer.

Our success depends in part on our ability to obtain and maintain patent protection sufficient to prevent others from utilizing our manufacturing components, manufacturing processes or marketing our products, as well as to successfully defend and enforce our patents against infringement by others. In order to protect our products, manufacturing components and manufacturing processes from unauthorized use by third parties, we must hold patent rights that cover our products, manufacturing components and manufacturing processes.

The patent position of biotechnology and bio-industrial companies can be highly uncertain because obtaining and determining the scope of patent rights involves complex legal and factual questions. The standards applied by the U.S. Patent and Trademark Office and foreign patent offices in granting patents are different and not always applied uniformly or predictably. There is no uniform worldwide policy regarding patentable subject matter, the scope of claims allowable in biotechnology and bio-industrial patents, or the formal requirements to obtain such patents. Consequently, patents may not issue from our pending patent applications. Furthermore, in the process of seeking patent protection or even after a patent is

granted, we could become subject to expensive and protracted proceedings, including patent interference, opposition, post-grant review and re-examination proceedings, which could invalidate or narrow the scope of our patent rights. As such, we do not know nor can we predict the scope and/or breadth of patent protection that we might obtain on our products and technology.

Changes either in patent laws or in interpretations of patent laws in the United States and other countries may diminish the value of our intellectual property rights. In the U.S., depending on the decisions and actions taken by the U.S. Congress, the federal courts, and the U.S. Patent and Trademark Office, the laws and regulations governing patents could change in unpredictable ways that would weaken our ability to obtain new patents or to enforce our existing patents and patents that we might obtain in the future. In foreign jurisdictions, depending on the decisions and actions taken by the foreign government, the judicial system of the jurisdiction, and its patent office, the laws and regulations governing patents could change in unpredictable ways that could weaken our ability to obtain new patents or to enforce our existing patents or patents that we might obtain in the future.

The America Invents Act ("AIA"), which was signed into law on September 16, 2011, brought a number of changes to the U.S. patent system and affects the way patents are prosecuted, challenged and litigated. Among the changes that went into effect on September 16, 2012, one of the most significant involves the implementation of a reformed post-grant review system. Other changes, which went into effect on March 16, 2013, include the transition from a "first-to-invent" to "first-to-file" system that attempts to harmonize the laws of the U.S. with the laws of most of the world. Lack of precedential interpretation of the new provisions of the AIA through specific cases or through guidelines promulgated by the U.S. Patent and Trademark Office and the lack of binding precedent from the courts increase the uncertainty of the impact of the AIA. Together, these changes may increase the costs of prosecution and enforcement of U.S. patents. While it is currently unclear what impact these changes will have on the operation of our business, they may favor companies able to dedicate more resources to patent filings and challenges.

Risks associated with enforcing our intellectual property rights in the United States and elsewhere.

If we were to initiate legal proceedings against a third party to enforce a patent claiming one of our technologies, the defendant could counterclaim that our patent is invalid and/or unenforceable or assert that the patent does not cover its manufacturing processes, manufacturing components or products. Proving patent infringement may be difficult, especially where it is possible to manufacture a product by multiple processes or when a patented process is performed by multiple parties. Patent litigation is also costly, time-consuming and distracting to our management. Furthermore, in patent litigation in the United States or elsewhere, defendant counterclaims alleging both invalidity and unenforceability are commonplace. Although we believe that we have conducted our patent prosecution in accordance with the duty of candor and in good faith, the outcome following legal assertions of invalidity and unenforceability during patent litigation is unpredictable. With respect to the validity of our patent rights, we cannot be certain, for example, that there is no invalidating prior art, of which we and the patent examiner were unaware during prosecution. If a defendant were to prevail on a legal assertion of invalidity and/or unenforceability, we would not be able to exclude others from practicing the inventions claimed therein. Such a loss of patent protection could have a material adverse effect on our business. Defendant counterclaims of antitrust or other anti-competitive conduct are also commonplace.

Even if our patent rights are found to be valid and enforceable, patent claims that survive litigation may not cover commercially viable products or prevent competitors from importing or marketing products similar to our own, or using manufacturing processes or manufacturing components similar to our own.

Although we believe we have obtained valid assignments of patent rights from all inventors, if an inventor did not adequately assign their patent rights to us, a third party could obtain a license to the patent from such inventor. This could preclude us from enforcing the patent against such third party.

We may not be able to enforce our intellectual property rights throughout the world.

The laws of some foreign countries where we intend to produce and use our proprietary strains in collaboration with sugar mills or other feedstock suppliers do not protect intellectual property rights to the same extent as the laws of the United States. Many companies have encountered significant problems in protecting and defending intellectual property rights in certain foreign jurisdictions. The legal systems of certain countries, including Brazil, do not favor the enforcement of patents and other intellectual property protection, particularly those relating to biotechnology and/or bio-industrial technologies. This could make it difficult for us to stop the infringement of our patents or misappropriation of our intellectual property rights in these countries. Proceedings to enforce our patent rights in certain foreign jurisdictions are unpredictable and could result in substantial costs and divert our efforts and attention from other aspects of our business. Accordingly, our efforts to protect our intellectual property rights in such countries may be inadequate.

Third parties may misappropriate our proprietary strains, information, or trade secrets despite a contractual obligation not to do so.

Third parties (including joint venture, collaboration, development and feedstock partners and former partners, contract manufacturers, and other contractors and shipping agents) often have custody or control of our proprietary microbe strains. If our proprietary microbe strains were stolen, misappropriated or reverse engineered, they could be used by other parties who may be able to use our strains or reverse-engineered strains for their own commercial gain. It is difficult to prevent misappropriation or subsequent reverse engineering. In the event that our proprietary microbe strains are misappropriated, it could be difficult for us to challenge the misappropriation or prevent reverse engineering, especially in countries with limited legal and intellectual property protection.

Confidentiality agreements with employees and third parties may not prevent unauthorized disclosure of proprietary information and trade secrets.

In addition to patents, we rely on confidentiality agreements to protect our technical know-how and other proprietary information. Confidentiality agreements are used, for example, when we talk to potential strategic partners. In addition, each of our employees signed a confidentiality agreement upon joining our company. Nevertheless, there can be no guarantee that an employee or an outside party will not make an unauthorized disclosure or use of our proprietary confidential information. This might happen intentionally or inadvertently. It is possible that a competitor will make use of such information, and that our competitive position will be compromised, in spite of any legal action we might take against persons making such unauthorized disclosures.

We also keep as trade secrets certain technical and proprietary information where we do not believe patent protection is appropriate, desirable or obtainable. However, trade secrets are difficult to protect. Although we use reasonable efforts to protect our trade secrets, our employees, consultants, contractors, outside scientific collaborators, partners, former partners and other advisors may unintentionally or willfully disclose our trade secrets to competitors or otherwise use misappropriated trade secrets to compete with us. It can be expensive and time consuming to enforce a claim that a third party illegally obtained and is using our trade secrets. Furthermore, the outcome of such claims is unpredictable. In addition, courts outside the United States may be less willing to or may not protect trade secrets. Moreover, our competitors may independently design around our intellectual property or develop equivalent knowledge, methods and know-how without misappropriating or otherwise violating our trade secret rights. Where a third party independently designs around our intellectual property or develops equivalent knowledge, methods and know-how without misappropriating or otherwise violating our trade secret rights, they may be able to seek patent protection for such equivalent knowledge, methods and know-how. This could prohibit us from practicing our trade secrets.

Claims by patent holders that our products or manufacturing processes infringe their patent rights could result in costly litigation or could require substantial time and money to resolve, whether or not we are successful, and an unfavorable outcome in these proceedings could have a material adverse effect on our business.

Our ability to commercialize our technology depends on our ability to develop, manufacture, market and sell our products without infringing the proprietary rights of patent holders or their authorized agents. An issued patent does not guarantee us the right to practice or utilize the patented inventions or commercialize the patented product. Third parties may have blocking patents that may prevent us from commercializing our patented products and utilizing our patented manufacturing components and manufacturing processes. In the event that we are made aware of blocking third party patents, we cannot be sure that licenses to the blocking third-party patents would be available or obtainable on terms favorable to us or at all.

Numerous U.S. and foreign issued patents and pending patent applications, which are owned by third parties, relate to (1) the production of bio-industrial products, including edible ingredients, oils, chemicals, drilling fluids and biofuels, and (2) the use of microalgae strains, such as microalgae strains containing genes to alter their oil composition. As such, there could be existing valid patents that our manufacturing processes, manufacturing components, or products may inadvertently infringe. There could also be existing invalid or unenforceable patents that could nevertheless be asserted against us and would require expenditure of resources to defend against. In addition, there are pending patent applications that are currently unpublished and therefore unknown to us that may later result in issued patents that are infringed by our products, manufacturing processes or other aspects of our business.

We may be exposed to future litigation based on claims that our products, manufacturing processes or manufacturing components infringe the intellectual property rights of others. There is inevitable uncertainty in any litigation, including patent litigation. Defending against claims of patent infringement is costly and time consuming, regardless of the outcome. Thus, even if we were to ultimately prevail, or to settle at an early stage of litigation, such litigation could burden us with substantial unanticipated costs. Some of our competitors are larger than we are and have substantially greater resources. These competitors

are, therefore, likely to be able to sustain the costs of complex patent litigation longer than we could. In addition, the costs and uncertainty associated with patent litigation could have a material adverse effect on our ability to continue our internal research and development programs, in-license needed technology, or enter into strategic partnerships that would help us commercialize our technologies. In addition, litigation or threatened litigation could result in significant demands on the time and attention of our management team, distracting them from the pursuit of other company business.

If a party successfully asserts a patent or other intellectual property rights against us, we might be barred from using certain of our manufacturing processes or manufacturing components, or from developing and commercializing related products. Injunctions against using specified processes or components, or prohibitions against commercializing specified products, could be imposed by a court or by a settlement agreement between us and a third party. In addition, we may be required to pay substantial damage awards to the third party, including treble or enhanced damages if we are found to have willfully infringed the third party's intellectual property rights. We may also be required to obtain a license from the third party in order to continue manufacturing and/or marketing the products that were found to infringe. It is possible that the necessary license will not be available to us on commercially acceptable terms, or at all. This could limit our ability to competitively commercialize some or all of our products.

During the course of any patent litigation, there could be public announcements of the results of hearings, rulings on motions, and other interim proceedings in the litigation. If securities analysts or investors regard these announcements as negative, the perceived value of our products, technology or intellectual property could be diminished. Accordingly, the market price of our common stock may decline.

We have received government funding in connection with the development of certain of our proprietary technologies, which could negatively affect our intellectual property rights in such technologies.

Some of our proprietary technology was developed with U.S. federal government funding. When new technologies are developed with U.S. government funding, the government obtains certain rights in any resulting patents, including a nonexclusive license authorizing the government to use the invention for non-commercial purposes. These rights may permit the government to disclose our confidential information to third parties and to exercise "march-in" rights to use or allow third parties to use our patented technology. The government can exercise its march-in rights if it determines that action is necessary because we fail to achieve practical application of the U.S. government-funded technology, because action is necessary to alleviate health or safety needs, to meet requirements of federal regulations, or to give preference to U.S. industry. In addition, U.S. government-funded inventions must be reported to the government and U.S. government funding must be disclosed in any resulting patent applications. In addition, our rights in such inventions are subject to government license rights and foreign manufacturing restrictions. Any exercise by the government of such rights could harm our competitive position or impact our operating results.

In addition, some of our technology was funded by a grant from the State of California. Inventions funded by this grant may be subject to forfeiture if we do not seek to patent or practically apply them. Any such forfeiture could have a materially adverse effect on our business. For proprietary technology developed with funding from the State of California, certain confidential information may be disclosed to third parties by the State of California. Our rights in such inventions are subject to State of California license and march-in rights. Any exercise by the State of California of such rights could harm our competitive position or impact our operating results.

Risks Related to Our Finances and Capital Requirements

Our financial results could vary significantly from quarter to quarter and are difficult to predict.

Our revenues and results of operations could vary significantly from quarter to quarter because of a variety of factors, many of which are outside of our control. As a result, comparing our results of operations on a period-to-period basis may not be meaningful. Factors that could cause our quarterly results of operations to fluctuate include:

- achievement, or failure to achieve, technology or product development milestones needed to allow us to enter target markets on a cost effective basis;
- delays or greater than anticipated expenses or time associated with the completion of new manufacturing facilities and the ramp up to nameplate capacity and optimization of production following completion of a new manufacturing facility;
- delays or greater than anticipated expenses associated with the provision of key support and/or operational services to manufacturing facilities;

- our capital requirements or capital requirements of our joint ventures;
- our ability to effectively manage larger working capital positions as we increase commercial production and distribution of our products;
- disruptions in the production process at any facility where we produce our products, including due to equipment failure or accidents;
- the timing, size and mix of sales to customers for our products;
- increases in price or decreases in availability of feedstocks;
- fluctuations in the price of, and demand for, products based on petroleum or other oils for which our products are alternatives;
- the unavailability of contract manufacturing capacity altogether or at anticipated cost;
- fluctuations in foreign currency exchange rates;
- seasonal production and sale of our products;
- the effects of competitive pricing pressures, including decreases in average selling prices of our products;
- unanticipated expenses associated with changes in governmental regulations and environmental, health and safety requirements;
- reductions or changes to existing regulations and policies that impact the fuel, chemical, food, nutrition and skin and personal care, and oil field services markets;
- departure of key employees;
- business interruptions, such as earthquakes and other natural disasters;
- our ability to integrate businesses that we may acquire;
- our ability to transition out of businesses that we may divest;
- risks associated with the international aspects of our business; and
- changes in general economic, industry and market conditions, both domestically and in foreign markets in which we operate.

Due to these factors and others the results of any quarterly or annual period may not meet our expectations or the expectations of our investors and may not be meaningful indications of our future performance.

We may require additional financing in the future and may not be able to obtain such financing on favorable terms, if at all, which could force us to delay, reduce or eliminate our research and development or commercialization activities.

To date, we have financed our operations primarily through our initial public offering, completed in June 2011, public and private placements of our equity and convertible debt securities, credit facilities, government grants and funding from strategic partners. In January 2013 we issued $125.0 million aggregate principal amount of convertible senior subordinated notes due 2018 (the "2018 Notes"). The 2018 Notes bear interest at a rate of 6.00% per year, payable in cash semi-annually. In April 2014 we issued 5,750,000 shares of our common stock and $149.5 million aggregate principal amount of convertible senior subordinated notes due 2019 (the "2019 Notes"). The 2019 Notes bear interest at a rate of 5.00% per year, payable in cash semi-annually. As of June 30, 2016 , approximately $57.5 million aggregate principal amount of the 2018 Notes was outstanding and approximately $148.1 million aggregate principal amount of the 2019 Notes was outstanding. We have also entered into a loan and security agreement with SVB that provides for a $12.9 million letter of credit facility and supports the SVB SLOC issued by SVB in favor of Itaú in connection with the JV BNDES Loan.

While we plan to enter into relationships with partners or collaborators for them to provide some portion or all of the capital needed to build production facilities, we may determine that it is more advantageous for us to provide some portion or all of the financing for new production facilities. Some of our previous funding has come from government grants; however, our future ability to obtain government grants is uncertain due to the competitive bid process and other factors.

In addition, we may have to raise additional funds through public or private debt or equity financings to meet our capital requirements, including our portion of joint venture funding requirements. For example, if the Solazyme Bunge JV needs and is unable to secure additional financing, we will be required to fund our portion of the Solazyme Bunge JV's capital requirements from existing sources or seek additional financing. In addition, our working capital requirements and the working capital requirements of the Solazyme Bunge JV may increase as we and the Solazyme Bunge JV each increase production due to an increase in inventory and the manufacture of out-of-specification product during the ramp-up of commercial production.

Although we believe that our current cash, cash equivalents, marketable securities and revenue from product sales will be sufficient to fund our current operations for at least the next 12 months **,** our liquidity assumptions may prove to be wrong, and we could utilize our available financial resources sooner than we currently expect. We may not be able to raise sufficient additional funds on terms that are favorable to us, if at all. If we fail to raise sufficient funds and continue to incur losses, our ability to fund our operations, take advantage of strategic opportunities, develop and commercialize products or technologies, or otherwise respond to competitive pressures could be significantly limited. If this happens, we may be forced to delay or terminate research and development programs or the commercialization of products resulting from our technologies, curtail or cease operations or obtain funds through collaborative and licensing arrangements that may require us to relinquish commercial rights, or grant licenses on terms that are not favorable to us. If adequate funds are not available, we will not be able to successfully execute our business plan or continue our business, and doubts may be raised regarding our ability to continue as a going concern.

Servicing our debt will require a significant amount of cash, and we may not have sufficient cash flow from our business to pay amounts due under our indebtedness.

As of June 30, 2016 , our total consolidated indebtedness was $205.5 million . Of our $205.5 million of indebtedness, none is currently secured. We also may be required to provide a corporate guarantee with respect to the portion of the JV BNDES loan that, when added to our bank guarantee, does not exceed our percentage ownership in the Solazyme Bunge JV.

Our ability to make scheduled payments of the principal of, to pay interest on or to refinance our indebtedness, including the 2018 Notes and the 2019 Notes, depends on our future performance, which is subject to economic, financial, competitive and other factors beyond our control. Our business may not continue to generate cash flow from operations in the future sufficient to service our debt and make necessary capital expenditures. If we are unable to generate such cash flow, we may be required to adopt one or more alternatives, such as selling assets, restructuring debt or obtaining additional equity capital on terms that may be onerous or highly dilutive. Our ability to refinance our indebtedness will depend on the capital markets and our financial condition at such time. We may not be able to engage in any of these activities or engage in these activities on desirable terms, which could result in a default on our debt obligations.

Despite our current debt levels, we may still incur substantially more debt or take other actions which would intensify the risks discussed above.

Despite our current consolidated debt levels, we and our subsidiaries may be able to incur substantial additional debt in the future, subject to the restrictions contained in our debt instruments, some of which may be secured debt. We are not restricted under the terms of the indentures governing the 2018 Notes and 2019 Notes from incurring additional debt, securing existing or future debt, recapitalizing our debt or taking a number of other actions that are not limited by the terms of the indentures governing the 2018 Notes and the 2019 Notes that could have the effect of diminishing our ability to make payments on the notes when due. The SVB Facility restricts our ability to incur additional indebtedness, including secured indebtedness, but if the facility matures or is repaid, we may not be subject to such restrictions under the terms of any subsequent indebtedness.

We have received government grant funding and entered contracts with government agencies, and may pursue government grant funding or contracts in the future. Our receipt of government funds through grants and contracts subjects us to additional regulatory oversight.

We have received government grants and have entered contracts with government agencies in the past. Activities funded by a government grant or pursuant to government contracts are subject to audits by government agencies. As part of an audit, these agencies may review our performance, cost structures and compliance with applicable laws, regulations and standards. Grant funds must be applied by us toward the research and development programs specified by the granting agency, rather than for all of our programs generally. If any of our grant-funded costs are found to be allocated improperly, the costs may not be reimbursed and any costs already reimbursed may have to be refunded. Accordingly, an audit could result in an adjustment to our revenues and results of operations. We are also subject to additional regulations based on our receipt of government grant funding and entry into government contracts. If we fail to comply with the requirements under our grants or contracts, we may face penalties or other negative consequences, and in such event we may not be awarded government funding or contracts in the future.

If we are unable to complete the previously announced sale of our Algenist business in a timely manner, or at all, our business could suffer. Even if we complete this transaction, the transaction involves risks, and we may not be able to realize the anticipated benefits from the transaction, which could have a material adverse effect on our results of operations or financial condition.

On August 2, 2016, we entered into a Contribution Agreement (the "Contribution Agreement") with TCP Algenist LLC, a Delaware limited liability company ("Buyer") and Algenist Holdings, Inc., a Delaware corporation ("Algenist Holdings"). Pursuant to, and subject to the terms and conditions of, the Contribution Agreement, we agreed to sell our Algenist business to Algenist Holdings in exchange for $20.2 million in cash (subject to working capital closing adjustments), 601,969 shares of common stock of Algenist Holdings (amounting to approximately 20% of its outstanding capital stock) and the assumption of substantially all of the liabilities related to the Algenist business by Algenist Holdings (collectively, the "Transaction"). The consummation of the Transaction is subject to certain specified closing conditions, including the receipt of certain required consents and other customary closing conditions and is expected to close in the third quarter of 2016, except that the transfer of certain delayed assets may occur at a later date as specified in the Agreement. If the Transaction is not consummated or the closing of the Transaction is delayed for any reason, our business, financial position and liquidity could be materially adversely affected. Moreover, the process of closing the Transaction and/or providing Algenist Holdings with agreed upon transition services following the closing of the Transaction could result in diversion of internal resources from our core businesses.

The Contribution Agreement includes restrictions on the conduct of our business prior to the completion of the sale, generally requiring us to conduct our business in the ordinary course and preventing us from taking specified actions without Buyer's approval. These and other contractual limitations in the Contribution Agreement may delay, restrict or prevent us from responding effectively to competitive pressures, industry developments or future business opportunities that may arise during the pre-closing period, even if management believes they are advisable. Restrictions in the Contribution Agreement may also limit our ability to pursue otherwise attractive business opportunities or strategic alternatives.

Even if we complete the Transaction, we may not be able to realize the anticipated benefits from the transaction. Upon the close of the Transaction, we will retain an ownership interest in the Algenist business of approximately 20% and expect to continue to supply active ingredients formulated in the Algenist product line to Algenist Holdings. However, we will not control the Algenist business following closing, including with respect to the operation of the business or the amount or timing of resources that Buyer devotes to the Algenist business or this supply arrangement. Our minority interest in the Algenist business and supply arrangement with Algenist Holdings following the closing of the Transaction may not provide us with an adequate return on investment and our investment may lose some or all of its value.

In addition, under the terms of the Contribution Agreement, subject to certain limitations, we have agreed to indemnify Buyer and certain other parties against breaches of our representations, warranties or covenants in the Contribution Agreement and other specified damages, and certain liabilities related to the Algenist business not expressly assumed by Algenist Holdings. If Buyer makes a claim for indemnification against us, we may incur expenses to contest or resolve the claim (including indemnifiable damages for third party claims, if adversely decided) that could adversely affect our financial results.

If we engage in any acquisitions, we will incur a variety of costs and may potentially face numerous risks that could adversely affect our business and operations.

If appropriate opportunities become available, we may seek to acquire additional businesses, assets, technologies or products to enhance our business. In connection with any acquisitions, we could issue additional equity or equity-linked securities such as the 2018 Notes or 2019 Notes, which would dilute our stockholders, incur substantial debt to fund the acquisitions, or assume significant liabilities.

Acquisitions involve numerous risks, including problems integrating the purchased operations, technologies or products, unanticipated costs and other liabilities, diversion of management's attention from our core businesses, adverse effects on existing business relationships with current and/or prospective collaborators, customers and/or suppliers, risks associated with entering markets in which we have no or limited prior experience and potential loss of key employees. Acquisitions may also require us to record goodwill and non-amortizable intangible assets that will be subject to impairment testing on a regular basis and potential periodic impairment charges, incur amortization expenses related to certain intangible assets, and incur write offs and restructuring and other related expenses, any of which could harm our operating results and financial condition. If we fail in our integration efforts with respect to any of our acquisitions and are unable to efficiently operate as a combined organization, our business and financial condition may be adversely affected.

Raising additional funds may cause dilution to our stockholders or require us to relinquish valuable rights.

If we elect to raise additional funds through equity offerings or offerings of equity-linked securities, our stockholders would likely experience dilution. Debt financing, if available, may subject us to restrictive covenants that could limit our

flexibility in conducting future business activities. For example, the SVB Facility contains financial covenants that, if breached, would require us to secure our obligations thereunder. To the extent that we raise additional funds through collaboration and licensing arrangements, it may be necessary for us to share a portion of the margin from the sale of our products. We may also be required to relinquish or license on unfavorable terms our rights to technologies or products that we otherwise would seek to develop or commercialize ourselves.

If we fail to maintain an effective system of internal controls, we might not be able to report our financial results accurately or prevent fraud; in that case, our stockholders could lose confidence in our financial reporting, which would harm our business and could negatively impact the price of our stock.

Effective internal controls are necessary for us to provide reliable financial reports and prevent fraud. In addition, Section 404 of the Sarbanes-Oxley Act of 2002 requires us and our independent registered public accounting firm to evaluate and report on our internal control over financial reporting, and have our chief executive officer and chief financial officer certify as to the accuracy and completeness of our financial reports. The process of implementing our internal controls and complying with Section 404 is expensive and time consuming, and requires significant attention from management. We cannot be certain that these measures will ensure that we implement and maintain adequate controls over our financial processes and reporting in the future.

Our management has concluded that there were no material weaknesses in our internal controls over financial reporting as of June 30, 2016 . However, there can be no assurance that our controls over financial processes and reporting will be effective in the future or that material weaknesses or significant deficiencies in our internal controls will not be discovered in the future. Because of its inherent limitations, internal control over financial reporting may not prevent or detect fraud or misstatements. Failure to implement required new or improved controls, or difficulties encountered in their implementation, could harm our results of operations or cause us to fail to meet our reporting obligations. If we or our independent registered public accounting firm discover a material weakness, the disclosure of that fact, even if quickly remedied, could reduce the market's confidence in our financial statements and harm our stock price.

Risks Relating to Securities Markets and Investment in Our Stock

The price of our common stock may be volatile.

Stock markets have experienced extreme volatility that has often been unrelated to the operating performance of particular companies. These broad market fluctuations may adversely affect the trading price of our common stock. In addition, the average daily trading volume of the securities of small companies, particularly small technology companies, can be very low. Limited trading volume of our stock may contribute to its volatility. Price declines in our common stock could result from general market and economic conditions and a variety of other factors, including any of the risk factors described in this report.

These broad market and industry factors may seriously harm the market price of our common stock, regardless of our operating performance. The market price of our common stock could also be affected by possible sales of our common stock by investors who view our convertible notes as a more attractive means of equity participation in us and by hedging or arbitrage trading activity that we expect involving our common stock.

The sale or issuance by us of substantial amounts of our common stock could adversely impact the trading price of our common stock.

A substantial number of shares of our common stock may be issued in connection with the exercise of options outstanding under our equity incentive plans, the vesting of restricted stock awards and restricted stock units, the exercise of outstanding warrants, the conversion of or exchange for outstanding 2018 Notes and 2019 Notes, and the conversion of our Series A preferred stock. See Note 2 in the accompanying notes to our unaudited interim condensed consolidated financial statements for additional information regarding the number of outstanding shares of potentially dilutive securities. Also see Note 14 in the accompanying notes to our unaudited interim condensed consolidated financial statements for information regarding the possible conversion of the 2018 Notes and 2019 Notes into shares of our common stock. In addition, we expect to issue additional shares under our equity incentive plans and employee stock purchase plan in the future. In the future, we may issue additional shares of common stock or other equity-linked securities to raise additional capital.

Any future sale or issuance of common stock could adversely impact the trading price of our common stock.

If the market price of our common stock were to cease to be quoted on a national exchange, the market price of our common stock and our reputation would be negatively impacted.

If we are unable to meet the stock price listing requirements of NASDAQ, including the requirement that our consolidated closing bid price not be below $1.00 per share for 30 consecutive business days, NASDAQ may issue a deficiency notice providing a 180 day compliance period prior to our common stock being subject to delisting from the NASDAQ Global Select Market. If our common stock were delisted from the NASDAQ Global Select Market, among other things, this could result in a number of negative implications, including reduced price and liquidity in our common stock as a result of the loss of market efficiencies associated with NASDAQ and the loss of federal preemption of state securities laws, as well as the potential loss of confidence by suppliers, customers and employees, the loss of institutional investor interest, the loss of the ability to raise future capital, less coverage by analysts, fewer business development opportunities and greater difficulty in obtaining financing. The threat of delisting may also lead to a "reverse split" to increase the per share price of our common stock.

Our certificate of incorporation, our bylaws and Delaware law contain provisions that could discourage another company from acquiring us and may prevent attempts by our stockholders to replace or remove our current management.

Provisions of Delaware law (where we are incorporated), our certificate of incorporation and bylaws may discourage, delay or prevent a merger or acquisition that stockholders may consider favorable, including transactions in which you might otherwise receive a premium for your shares. In addition, these provisions may frustrate or prevent any attempts by our stockholders to replace or remove our current management by making it more difficult for stockholders to replace or remove our board of directors. These provisions include:

- authorizing the issuance of "blank check" preferred stock without any need for action by stockholders;
- requiring supermajority stockholder voting to effect certain amendments to our certificate of incorporation and bylaws;
- eliminating the ability of stockholders to call special meetings of stockholders;
- prohibiting stockholder action by written consent;
- establishing advance notice requirements for nominations for election to the board of directors or for proposing matters that can be acted on by stockholders at stockholder meetings; and
- dividing our board of directors into three classes so that only one third of our directors will be up for election in any given year.

In addition, we are subject to Section 203 of the Delaware General Corporation Law, which, under certain circumstances, may make it more difficult for a person who would be an "interested stockholder," as defined in Section 203, to effect various business combinations with us for a three-year period. Our certificate of incorporation and bylaws do not exclude us from the restrictions imposed under Section 203. These provisions could impede a merger, takeover or other business combination involving us or discourage a potential acquirer from making a tender offer for our common stock, which, under certain circumstances, could reduce the market price of our common stock.

We incur significant expenses as a result of being a public company.

As a public company, we incur significant additional legal, accounting and other expenses. For example, as a public company, we have adopted internal and disclosure controls and procedures and bear all of the internal and external costs of preparing and distributing periodic public reports in compliance with our obligations under applicable securities laws.

In addition, changing laws, regulations and standards relating to corporate governance and public disclosure, including the Sarbanes-Oxley Act of 2002 and related regulations implemented by the SEC and the NASDAQ-GS, create uncertainty for public companies, increasing legal and financial compliance costs and making some activities more time consuming. We evaluate and monitor developments with respect to new and proposed rules and cannot predict or estimate the amount of additional costs we may incur or the timing of such costs. These laws, regulations and standards are subject to varying interpretations, in many cases due to their lack of specificity, and, as a result, their application in practice may evolve over time as new guidance is provided by regulatory and governing bodies. This could result in continuing uncertainty regarding compliance matters and higher costs necessitated by ongoing revisions to disclosure and governance practices. We intend to invest resources to comply with evolving laws, regulations and standards, and this investment may result in increased general and administrative expenses and a diversion of management's time and attention from revenue-generating activities to compliance activities. If our efforts to comply with new laws, regulations and standards differ from the activities intended by regulatory or governing bodies due to ambiguities related to practice, regulatory authorities may initiate legal proceedings

against us and our business may be harmed. These factors could also make it more difficult for us to attract and retain qualified members of our board of directors, particularly to serve on our audit committee and compensation committee, and attract and retain qualified executive officers. If these requirements divert our management's attention from other business concerns, they could have a material adverse effect on our business, financial condition and results of operations.

If securities or industry analysts do not continue to publish research or publish inaccurate or unfavorable research about our business, our stock price and trading volume could decline.

The trading market for our common stock depends in part on the research and reports that securities or industry analysts publish about us or our business. If securities or industry analysts do not continue coverage of our company, the trading price for our common stock would be negatively impacted. If one or more of the analysts who cover us downgrade our common stock or publish inaccurate or unfavorable research about our business, the price of our common stock would likely decline. If one or more of these analysts cease coverage of our company or fail to publish reports on us regularly, demand for our common stock could decrease, which might cause the price of our common stock and its trading volume to decline.

We do not anticipate paying cash dividends, and accordingly, stockholders must rely on stock appreciation for any return on their investment.

We do not anticipate paying cash dividends in the foreseeable future. As a result, only appreciation of the price of our common stock, which may never occur, would provide a return to stockholders. Our SVB Facility restricts our ability to pay cash dividends, and we may be subject to additional dividend restrictions under the terms of future indebtedness. Investors seeking cash dividends should not invest in our common stock.

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

Not applicable.

Item 3. Defaults Upon Senior Securities.

None.

Item 4. Mine Safety Disclosures.

Not applicable.

Item 5. Other Information.

None.

Item 6. Exhibits.

Exhibit Number	Description	Incorporated by Reference				Filed Herewith
		Form	File No.	Filing Date	Exhibit	
3.1	Certificate of Amendment of Amended and Restated Certificate of Incorporation	8-K	001-35189	May 12, 2016	3.1	
3.2	Certificate of Amendment of Amended and Restated Certificate of Incorporation	S-3	333-212448	July 8, 2016	3.3	
3.3	Amended and Restated Bylaws	8-K	001-35189	May 12, 2016	3.2	
10.1	Loan and Security Agreement, dated as of June 28, 2016 between Silicon Valley Bank and TerraVia Holdings, Inc.					X
10.2	Standby Letter of Credit Agreement dated as of April 12, 2016 between Silicon Valley Bank and Solazyme, Inc.					X
10.3	Bank Services Pledge Agreement dated as of April 12, 2016 between Silicon Valley Bank and Solazyme, Inc.					X
31.1	Certification of the Chief Executive Officer, as required by Section 302 of the Sarbanes-Oxley Act of 2002					X
31.2	Certification of the Chief Financial Officer, as required by Section 302 of the Sarbanes-Oxley Act of 2002					X
32.1 *	Certification of the Chief Executive Officer and Chief Financial Officer, as required by Section 906 of the Sarbanes-Oxley Act of 2002					X
101	The following financial statements, formatted in XBRL: (i) Condensed Consolidated Balance Sheets as of June 30, 2016 and December 31, 2015, (ii) Condensed Consolidated Statements of Operations for the three and six months ended June 30, 2016 and 2015; (iii) Condensed Consolidated Statements of Comprehensive Loss for the three and six months ended June 30, 2016 and 2015 (iv) Condensed Consolidated Statements of Cash Flows for the six months ended June 30, 2016 and 2015; and (v) Notes to Unaudited Condensed Consolidated Financial Statements.					X

* This certification shall not be deemed "filed" for purposes of Section 18 of the Securities Exchange Act of 1934, as amended, or otherwise subject to the liability of that Section, nor shall it be deemed incorporated by reference into any filing under the Securities Act of 1933, as amended or the Exchange Act of 1934, as amended.

SIGNATURES

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

TerraVia Holdings, Inc.

By: /s/ TYLER W. PAINTER

Tyler W. Painter

Chief Operating Officer and Chief Financial Officer

(Principal Financial and Accounting Officer and duly authorized signatory)

Date: August 8, 2016

LOAN AND SECURITY AGREEMENT

THIS LOAN AND SECURITY AGREEMENT (this " **Agreement** ") dated as of June 28, 2016 (the " **Effective Date** ") between **SILICON VALLEY BANK** , a California corporation (" **Bank** "), and **TERRAVIA HOLDINGS, INC.** , a Delaware corporation, formerly known as Solazyme, Inc. (" **Borrower** "), provides the terms on which Bank shall lend to Borrower and Borrower shall repay Bank. The parties agree as follows:

1. ACCOUNTING AND OTHER TERMS

Accounting terms not defined in this Agreement shall be construed following GAAP. Calculations and determinations must be made following GAAP. Capitalized terms not otherwise defined in this Agreement shall have the meanings set forth in Section 13. All other terms contained in this Agreement, unless otherwise indicated, shall have the meaning provided by the Code to the extent such terms are defined therein.

2. LOAN AND TERMS OF PAYMENT

2.1 Promise to Pay . Borrower hereby unconditionally promises to pay Bank the outstanding principal amount of all Credit Extensions and accrued and unpaid interest thereon as and when due in accordance with this Agreement.

2.1.1 Letters of Credit

(a) From the Effective Date until the Letter of Credit Expiration Date, Bank shall issue or have issued Letters of Credit denominated in Dollars or a Foreign Currency for Borrower's account, including, without limitation, the Outstanding Letter of Credit. The aggregate Dollar Equivalent of the face amount of outstanding Letters of Credit (including drawn but unreimbursed Letters of Credit and any Letter of Credit Reserve) may not exceed Twelve Million Nine Hundred Dollars ($12,900,000). If at any time the aggregate Dollar Equivalent of the face amount of outstanding Letters of Credit (including drawn but unreimbursed Letters of Credit and any Letter of Credit Reserve) exceeds Twelve Million Nine Hundred Dollars ($12,900,000) then Borrower shall immediately provide to Bank cash collateral in the amount of such excess.

(b) In no event shall any Letter of Credit have an expiration date after the Letter of Credit Expiration Date. If, on the Letter of Credit Expiration Date (or the effective date of any termination of this Agreement), there are any outstanding Letters of Credit, then on such date Borrower shall provide to Bank cash collateral in an amount equal to 125% of the face amount of all such Letters of Credit plus all interest, fees, and costs due or to become due in connection therewith (as estimated by Bank in its commercially reasonable business judgment), to secure all of the Obligations relating to said Letters of Credit.

(c) To guard against fluctuations in currency exchange rates, upon the issuance of any Letter of Credit payable in a Foreign Currency, Bank may create a reserve (the " **Letter of Credit Reserve** ") in an amount equal to twenty five percent (25%) of the face amount of such

Letter of Credit. The availability of Letters of Credit shall be reduced by the amount of such Letter of Credit Reserve for as long as such Letter of Credit remains outstanding.

(d) All Letters of Credit shall be in form and substance acceptable to Bank in its sole discretion and shall be subject to the terms and conditions of Bank's standard Application and Letter of Credit Agreement (the " **Letter of Credit Application** "). Borrower agrees to execute any further documentation in connection with the Letters of Credit as Bank may reasonably request. Borrower further agrees to be bound by the regulations and interpretations of the issuer of any Letters of Credit guaranteed by Bank and opened for Borrower's account or by Bank's interpretations of any Letter of Credit issued by Bank for Borrower's account, and Borrower understands and agrees that Bank shall not be liable for any error, negligence, or mistake, whether of omission or commission, in following Borrower's instructions in good faith or those contained in the Letters of Credit or any modifications, amendments, or supplements thereto.

(e) The obligation of Borrower to immediately reimburse Bank for drawings made under Letters of Credit shall be absolute, unconditional, and irrevocable, and shall be performed strictly in accordance with the terms of this Agreement, such Letters of Credit, and the Letter of Credit Application.

(f) Borrower may request that Bank issue a Letter of Credit payable in a Foreign Currency. If a demand for payment is made under any such Letter of Credit, Bank shall treat such demand as a Credit Extension to Borrower of the Dollar Equivalent of the amount thereof (plus fees and charges in connection therewith such as wire, cable, SWIFT or similar charges).

2.2 Payment of Interest on the Credit Extensions .

(a) Interest Rate . If a demand for payment is made under any Letter of Credit the principal amount paid by Bank shall accrue interest at a floating per annum rate equal to two percentage points (2.0%) above the Prime Rate, which interest shall be payable on demand.

(b) Default Rate . Immediately upon the occurrence and during the continuance of an Event of Default, Obligations shall bear interest at a rate per annum which is four percentage points (4.0%) above the rate that is otherwise applicable thereto (the " **Default Rate** ") unless Bank otherwise elects from time to time in its sole discretion to impose a smaller increase. Fees and expenses which are required to be paid by Borrower pursuant to the Loan Documents (including, without limitation, Bank Expenses) but are not paid when due shall bear interest until paid at a rate equal to the highest rate applicable to the Obligations. Payment or acceptance of the increased interest rate provided in this Section 2.2(b) is not a permitted alternative to timely payment and shall not constitute a waiver of any Event of Default or otherwise prejudice or limit any rights or remedies of Bank.

(c) Adjustment to Interest Rate . Changes to the interest rate of any Credit Extension based on changes to the Prime Rate shall be effective on the effective date of any change to the Prime Rate and to the extent of any such change.

(d) Payment; Interest Computation . Principal and interest on any amounts advanced by the Bank under any Letter of Credit are payable on demand and shall be computed on the basis of a 360-day year for the actual number of days elapsed. In computing interest, the date of the making of any Credit Extension shall be included and the date of payment shall be excluded; provided, however, that if any Credit Extension is repaid on the same day on which it is made, such day shall be included in computing interest on such Credit Extension.

2.3 Fees . Borrower shall pay to Bank

(a) Commitment Fee . A fully earned, non-refundable commitment fee of $30,000.00, on the Effective Date;

(b) Letter of Credit Fee . Bank's customary fees and expenses for the issuance or renewal of Letters of Credit , including, without limitation, a letter of credit fee of two and one half percent (2.50%) per annum of the Dollar Equivalent of the face amount of each Letter of Credit issued, upon the issuance of such Letter of Credit, each anniversary of the issuance during the term of such Letter of Credit, and upon the renewal of such Letter of Credit by Bank; and

(c) Bank Expenses . All Bank Expenses (including reasonable attorneys' fees and expenses for documentation and negotiation of this Agreement) incurred through and after the Effective Date, when due (or, if no stated due date, upon demand by Bank).

(d) Fees Fully Earned . Unless otherwise provided in this Agreement or in a separate writing by Bank, Borrower shall not be entitled to any credit, rebate, or repayment of any fees earned by Bank pursuant to this Agreement notwithstanding any termination of this Agreement or the suspension or termination of Bank's obligation to make loans and advances hereunder. Bank may deduct amounts owing by Borrower under the clauses of this Section 2.3 pursuant to the terms of Section 2.4(c). Bank shall provide Borrower written notice of deductions made from the Designated Deposit Account pursuant to the terms of the clauses of this Section 2.3 within one (1) Business Day of such deduction.

2.4 Payments; Application of Payments; Debit of Accounts .

(a) All payments to be made by Borrower under any Loan Document shall be made in immediately available funds in Dollars, without setoff or counterclaim, before 12:00 p.m. Pacific time on the date when due. Payments of principal and/or interest received after 12:00 p.m. Pacific time are considered received at the opening of business on the next Business Day. When a payment is due on a day that is not a Business Day, the payment shall be due the next Business Day, and additional fees or interest, as applicable, shall continue to accrue until paid.

(b) Bank has the exclusive right to determine the order and manner in which all payments with respect to the Obligations may be applied. Borrower shall have no right to specify the order or the accounts to which Bank shall allocate or apply any payments required to be made by Borrower to Bank or otherwise received by Bank under this Agreement when any such allocation or application is not specified elsewhere in this Agreement.

(c) Bank may debit any of Borrower's deposit accounts, including the Designated Deposit Account, for principal and interest payments or any other amounts Borrower owes Bank when due. These debits shall not constitute a set-off.

2.5 Withholding . Payments received by Bank from Borrower under this Agreement will be made free and clear of and without deduction for any and all present or future taxes, levies, imposts, duties, deductions, withholdings, assessments, fees or other charges imposed by any Governmental Authority (including any interest, additions to tax or penalties applicable thereto), except as required by a Requirement of Law or FATCA. Specifically, however, if at any time any Requirement of Law or FATCA requires Borrower to make any withholding or deduction from any such payment or other sum payable hereunder to Bank, Borrower hereby covenants and agrees that the amount due from Borrower with respect to such payment or other sum payable hereunder will be increased to the extent necessary to ensure that, after the making of such required withholding or deduction, Bank receives a net sum equal to the sum which it would have received had no withholding or deduction been required, and Borrower shall pay the full amount withheld or deducted to the relevant Governmental Authority. Borrower will, upon request, furnish Bank with proof reasonably satisfactory to Bank indicating that Borrower has made such withholding payment; provided, however, that Borrower need not make any withholding payment if the amount or validity of such withholding payment is contested in good faith by appropriate and timely proceedings and as to which payment in full is bonded or reserved against by Borrower. Notwithstanding anything herein to the contrary, this Section 2.5 shall not apply to (i) taxes imposed on, or measured by, the recipient's net income (however measured), branch profits taxes and franchise taxes imposed in lieu of net income taxes, (ii) taxes imposed solely as a result of the Bank's activities or place of incorporation or formation in, or other present or former connection to, such jurisdiction, (iii) U.S. federal withholding taxes imposed pursuant to a law in effect on the date on which Bank changes its lending office, except to the extent that, pursuant to this Section 2.5 amounts with respect to such taxes were payable to Bank immediately before it changed its lending office, (iv) taxes attributable to Bank's failure to comply with Section 2.6, and (v) taxes imposed on any "withholdable payment" payable to such recipient as a result of the failure of such recipient to satisfy the applicable requirements as set forth in FATCA. The agreements and obligations of Borrower contained in this Section 2.5 shall survive the termination of this Agreement.

2.6 Tax Forms . Tax Forms. Bank shall deliver on the date hereof an IRS Form W-9. In addition, if after the date hereof, the applicable Lender is entitled to an exemption from or reduction of withholding tax with respect to payments made under this Agreement, it shall deliver to Borrower, at the time or times reasonably requested, such properly completed and executed documentation reasonably requested as will permit such payments to be made without withholding or at a reduced rate of withholding.

3. CONDITIONS OF LETTERS OF CREDIT

3.1 Conditions Precedent to Initial Credit Extension . Bank's obligation to make the initial Credit Extension is subject to the condition precedent that Bank shall have received, in

form and substance satisfactory to Bank, such documents, and completion of such other matters, as Bank may reasonably deem necessary or appropriate, including, without limitation:

(a) duly executed original signatures to the Loan Documents;

(b) the Operating Documents and long-form good standing certificates of Borrower certified by the Secretary of State (or equivalent agency) of Borrower's jurisdiction of organization and the State of California, each as of a date no earlier than thirty (30) days prior to the Effective Date;

(c) duly executed original signatures to the completed Borrowing Resolutions for Borrower;

(d) certified copies, dated as of a recent date, of financing statement searches, as Bank may request, accompanied by written evidence (including any UCC termination statements) that the Liens indicated in any such financing statements either constitute Permitted Liens or have been or, in connection with the initial Credit Extension, will be terminated or released;

(e) the Perfection Certificate of Borrower, together with the duly executed original signatures thereto;

(f) evidence satisfactory to Bank that the insurance policies and endorsements required by Section 6.4 hereof are in full force and effect; and

(g) payment of the fees and Bank Expenses then due as specified in Section 2.3 hereof.

3.2 Conditions Precedent to all Letters of Credit . Bank's obligations to issue any Letter of Credit, including the initial Credit Extension, is subject to the following conditions precedent:

(a) timely receipt of an executed Letter of Credit Application acceptable to Bank;

(b) evidence satisfactory to Bank that Borrower is in compliance with the terms of Section 6.6 of this Agreement;

(c) the representations and warranties in this Agreement shall be true, accurate, and complete in all material respects on the date each Letter of Credit is issued; provided, however, that such materiality qualifier shall not be applicable to any representations and warranties that already are qualified or modified by materiality in the text thereof; and provided, further that those representations and warranties expressly referring to a specific date shall be true, accurate and complete in all material respects as of such date, and no Event of Default shall have occurred and be continuing or result from the Credit Extension. Each Credit Extension is Borrower's representation and warranty on that date that the representations and warranties in this Agreement remain true, accurate, and complete in all material respects; provided, however,

that such materiality qualifier shall not be applicable to any representations and warranties that already are qualified or modified by materiality in the text thereof; and provided, further that those representations and warranties expressly referring to a specific date shall be true, accurate and complete in all material respects as of such date; and

(d) Bank determines in the exercise of its reasonable discretion that there has not been a Material Adverse Change.

3.3 Covenant to Deliver . Borrower agrees to deliver to Bank each item required to be delivered to Bank under this Agreement as a condition precedent to any Credit Extension. Borrower expressly agrees that a Credit Extension made prior to the receipt by Bank of any such item shall not constitute a waiver by Bank of Borrower's obligation to deliver such item, and the making of any Credit Extension in the absence of a required item shall be in Bank's sole discretion.

4. CREATION OF SECURITY INTEREST.

4.1 Grant of Security Interest . Borrower hereby grants Bank, to secure the payment and performance in full of all of the Obligations, a continuing security interest in, and pledges to Bank, the Collateral, wherever located, whether now owned or hereafter acquired or arising, and all proceeds thereof; provided, that (a) with respect to the Springing Collateral, such security interest shall not be effective unless or until a Springing Lien Event has occurred, (b) unless otherwise agreed to in writing by Bank, such security interest shall not constitute a cure or waiver of the Events of Default giving rise thereto, and (c) any cure or waiver of the Events of Default shall not be deemed a release of Bank's security interest in the Springing Collateral unless Bank otherwise consents thereto in writing.

Immediately upon the occurrence of a Springing Lien Event, (a) Borrower shall be deemed without any further action to grant to Bank, to secure the payment and performance in full of all of the Obligations, a continuing security interest in, and pledge to the Bank of the Springing Collateral, (b) all cash maintained with Bank pursuant to the requirements of Section 6.6 of this Agreement shall be transferred by Bank (with written notice to Borrower promptly after such transfer) into one or more restricted or blocked accounts maintained with Bank, which accounts are hereby pledged to Bank and from which Bank shall have the right to withdraw funds pursuant to Section 2.4(c) of this Agreement, it being understood and agreed that prior to the occurrence and continuance of an Event of Default, Borrower shall have the right to withdraw any funds in such accounts which are in excess of the amounts then required to be maintained in such accounts under Section 6.6 of this Agreement, and (c) at Bank's discretion, Bank may take any steps deemed necessary by Bank in its reasonable determination to perfect and protect its lien on the Springing Collateral, including without limitation, the filing of UCC financing statements with respect to the Springing Collateral; it being understood and agreed that Bank will not file any UCC financing statements describing the Collateral until after the occurrence of a Springing Lien Event.

Borrower acknowledges that it previously has entered, and/or may in the future enter, into Bank Services Agreements with Bank. Regardless of the terms of any Bank Services Agreement, Borrower agrees that any amounts Borrower owes Bank thereunder shall be deemed to be

Obligations hereunder and that it is the intent of Borrower and Bank to have all such Obligations secured by the first priority perfected security interest in the Collateral granted herein (subject only to Permitted Liens that are permitted pursuant to the terms of this Agreement to have superior priority to Bank's Lien in this Agreement).

If this Agreement is terminated, Bank's Lien in the Collateral shall continue until the Obligations (other than inchoate indemnity obligations) are repaid in full in cash. Upon payment in full in cash of the Obligations (other than inchoate indemnity obligations) and at such time as Bank's obligation to make Credit Extensions has terminated, Bank shall, at the sole cost and expense of Borrower, release its Liens in the Collateral and all rights therein shall revert to Borrower. In the event (x) all Obligations (other than inchoate indemnity obligations), except for Bank Services, are satisfied in full, and (y) this Agreement is terminated, Bank shall terminate the security interest granted herein upon Borrower providing cash collateral acceptable to Bank in its good faith business judgment for Bank Services, if any.

4.2 Priority of Security Interest . Borrower represents, warrants, and covenants that the security interest granted herein is and shall at all times continue to be a first priority perfected security interest in the Collateral (subject only to Permitted Liens that are permitted pursuant to the terms of this Agreement to have superior priority to Bank's Lien under this Agreement).

4.3 Authorization to File Financing Statements . Borrower hereby authorizes Bank to file UCC financing statements, without notice to Borrower, with all appropriate jurisdictions to perfect or protect Bank's interest or rights hereunder, including a notice that any assignment, mortgage, pledge, grant of a security interest in or upon, or encumbrance of its assets (other than Excluded Assets, those assets which are excluded from the Collateral pursuant to (a) thru (g) and (i) and (j) set forth in Exhibit A-1 and Permitted Liens), or any agreement or other arrangement with any Person (other than Bank) which directly or indirectly prohibits or has the effect of prohibiting Borrower from assigning, mortgaging, pledging granting a security interest in or upon, or encumbering any of Borrower's assets (other than Excluded Assets, those assets which are excluded from the Collateral pursuant to (a) thru (g) and (i) and (j) set forth in Exhibit A-1 and Permitted Liens) shall be deemed to violate the rights of Bank under the Code. Upon the occurrence of a Springing Lien Event, Borrower hereby authorizes Bank to file financing statements, without notice to Borrower, with all appropriate jurisdictions to perfect or protect Bank's interest or rights in the Springing Collateral. For the avoidance of doubt, the Bank shall not be permitted to file any UCC financing statements describing the Springing Collateral until after the occurrence of a Springing Lien Event.

5. REPRESENTATIONS AND WARRANTIES

Borrower represents and warrants as follows:

5.1 Due Organization, Authorization; Power and Authority . Borrower is duly existing and in good standing as a Registered Organization in its jurisdiction of formation and is qualified and licensed to do business and is in good standing in any jurisdiction in which the conduct of its business or its ownership of property requires that it be qualified except where the failure to do so could not reasonably be expected to have a material adverse effect on Borrower's

business. In connection with this Agreement, Borrower has delivered to Bank, on or prior to the Effective Date, a completed certificate signed by Borrower, entitled "Perfection Certificate". Borrower represents and warrants to Bank that on the Effective Date and on the date of each Credit Extension (a) Borrower's exact legal name is that indicated on the Perfection Certificate and on the signature page hereof; (b) Borrower is an organization of the type and is organized in the jurisdiction set forth in the Perfection Certificate; (c) the Perfection Certificate accurately sets forth Borrower's organizational identification number or accurately states that Borrower has none; (d) the Perfection Certificate accurately sets forth Borrower's place of business, or, if more than one, its chief executive office as well as Borrower's mailing address (if different than its chief executive office); (e) except as set forth in the Perfection Certificate, Borrower (and each of its predecessors) has not, in the past five (5) years, changed its jurisdiction of formation, organizational structure or type, or any organizational number assigned by its jurisdiction; and (f) all other information set forth on the Perfection Certificate pertaining to Borrower and each of its Subsidiaries is accurate and complete (it being understood and agreed that Borrower may from time to time update certain information in the Perfection Certificate after the Effective Date to the extent permitted by one or more specific provisions in this Agreement).

The execution, delivery and performance by Borrower of the Loan Documents to which it is a party have been duly authorized, and do not (i) conflict with any of Borrower's organizational documents, (ii) contravene, conflict with, constitute a default under or violate any material Requirement of Law, (iii) contravene, conflict or violate any applicable order, writ, judgment, injunction, decree, determination or award of any Governmental Authority by which Borrower or any of its Subsidiaries or any of their property or assets may be bound or affected, (iv) require any action by, filing, registration, or qualification with, or Governmental Approval from, any Governmental Authority (except such Governmental Approvals which have already been obtained and are in full force and effect), or (v) conflict with, contravene, constitute a default or breach under, or result in or permit the termination or acceleration of, any material agreement by which Borrower is bound where any such conflict, contravention, default or breach could individually or in the aggregate reasonably be expected to have a material adverse effect on the business of Borrower and its consolidated Subsidiaries, taken as a whole. Borrower is not in default under any agreement to which it is a party or by which it is bound in which the default could reasonably be expected to have a material adverse effect on the business of Borrower and its consolidated Subsidiaries, taken as a whole.

5.2 Collateral . Borrower has good title to, rights in, and the power to transfer each item of the Collateral upon which it purports to grant a Lien hereunder, free and clear of any and all Liens except Permitted Liens. Borrower has no domestic deposit accounts other than the deposit accounts with Bank, the deposit accounts, if any, described in the Perfection Certificate delivered to Bank in connection herewith, or of which Borrower has given Bank notice and taken such actions as are necessary to give Bank a perfected security interest therein as required by Section 6.5(b).

After a Springing Lien Event, Borrower shall at Bank's request immediately provide Bank with an updated Perfection Certificate and Bank shall have the right to: (i) prohibit any Collateral (other than any in-transit Collateral) in excess of $1,000,000 in the aggregate to be in the possession

of any third party bailee (such as a warehouse) except as otherwise provided in the Perfection Certificate and (ii) prohibit any components of the Collateral (other than any in-transit Collateral) in excess of $1,000,000 in the aggregate from being maintained at locations other than as provided in the Perfection Certificate or as permitted pursuant to Section 7.2.

5.3 Litigation . Except as set forth in the Perfection Certificate, there are no actions or proceedings pending or, to the knowledge of any Responsible Officer, threatened in writing by or against Borrower or any of its Subsidiaries that in the reasonable judgment of Borrower could reasonably be expected to result in damages or costs to Borrower or any of its Subsidiaries of more than, individually or in the aggregate, Two Million Dollars ($2,000,000).

5.4 Financial Statements; Financial Condition . All consolidated financial statements for Borrower and its Subsidiaries delivered to Bank fairly present in all material respects Borrower's consolidated financial condition and Borrower's consolidated results of operations. There has not been any material adverse change in the consolidated financial condition or business of Borrower and its consolidated Subsidiaries, taken as a whole, since the date of the most recent financial statements submitted to Bank.

5.5 Solvency . The fair salable value of Borrower's consolidated assets (including goodwill minus disposition costs) exceeds the fair value of Borrower's liabilities; Borrower is not left with unreasonably small capital after the transactions in this Agreement; and Borrower is able to pay its debts (including trade debts) as they mature.

5.6 Regulatory Compliance . Borrower is not an "investment company" or a company "controlled" by an "investment company" under the Investment Company Act of 1940, as amended. Borrower is not engaged as one of its important activities in extending credit for margin stock (under Regulations X, T and U of the Federal Reserve Board of Governors). Borrower (a) has complied in all material respects with all Requirements of Law, and (b) has not violated any Requirements of Law the violation of which could reasonably be expected to have a material adverse effect on the business of Borrower and its consolidated Subsidiaries taken as a whole. None of Borrower's or any of its Subsidiaries' properties or assets has been used by Borrower or any Subsidiary in disposing, producing, storing, treating, or transporting any hazardous substance, other than legally, which could reasonably be expected to have a material adverse effect on the business of Borrower and its Subsidiaries, taken as a whole. Borrower and each of its Subsidiaries have obtained all consents, approvals and authorizations of, made all declarations or filings with, and given all notices to, all Government Authorities that are necessary to continue their respective businesses as currently conducted.

5.7 Subsidiaries; Investments . Borrower does not own any stock or partnership interest or other equity securities except for Permitted Investments.

5.8 Tax Returns and Payments; Pension Contributions . Borrower has timely filed all required tax returns and reports, and Borrower has timely paid all foreign, federal, state and local taxes, assessments, deposits and contributions owed by Borrower except (a) to the extent such taxes are being contested in good faith by appropriate proceedings promptly instituted and diligently conducted, so long as such reserve or other appropriate provision, if any, as shall be

required in conformity with GAAP shall have been made therefor, or (b) if such taxes, assessments, deposits and contributions do not, individually or in the aggregate, exceed One Million Dollars ($1,000,000).

To the extent Borrower defers payment of any contested taxes in excess of One Million Dollars ($1,000,000), Borrower shall (i) notify Bank in writing of the commencement of, and any material development in, the proceedings, and (ii) post bonds or take any other steps required to prevent the governmental authority levying such contested taxes from obtaining a Lien upon any of the Collateral that is other than a "Permitted Lien." Borrower is unaware of any claims or adjustments proposed for any of Borrower's prior tax years which could result in additional taxes becoming due and payable by Borrower in excess of One Million Dollars ($1,000,000). Borrower has paid all amounts necessary to fund all present pension, profit sharing and deferred compensation plans in accordance with their terms, and Borrower has not withdrawn from participation in, and has not permitted partial or complete termination of, or permitted the occurrence of any other event with respect to, any such plan which could reasonably be expected to result in any liability of Borrower, including any liability to the Pension Benefit Guaranty Corporation or its successors or any other governmental agency in excess of One Million Dollars ($1,000,000).

5.9 Use of Proceeds . Borrower shall use the Credit Extensions solely to issue Letters of Credit and not for personal, family, household or agricultural purposes.

5.10 Full Disclosure . No written representation, warranty or other statement of Borrower in any certificate or written statement given to Bank, as of the date such representation, warranty, or other statement was made, taken together with all such written certificates and written statements given to Bank, contains any untrue statement of a material fact or omits to state a material fact necessary to make the statements contained in the certificates or statements not misleading (it being understood and agreed by Bank that the projections and forecasts provided by Borrower in good faith and based upon reasonable assumptions are not viewed as facts and that actual results during the period or periods covered by such projections and forecasts may differ from the projected or forecasted results).

5.11 Definition of "Knowledge." For purposes of the Loan Documents, whenever a representation or warranty is made to Borrower's knowledge or awareness, to the "best of" Borrower's knowledge, or with a similar qualification, knowledge or awareness means the actual knowledge, after reasonable investigation, of any Responsible Officer.

6. AFFIRMATIVE COVENANTS

Borrower shall do all of the following:

6.1 Government Compliance .

(a) Maintain its and all its Subsidiaries' legal existence and good standing in their respective jurisdictions of formation and maintain qualification in each jurisdiction in which the failure to so qualify would reasonably be expected to have a material adverse effect on the business or operations of Borrower and its consolidated Subsidiaries, taken as a whole.

Borrower shall comply, and have each Subsidiary comply, with all laws, ordinances and regulations to which it is subject, noncompliance with which could reasonably be expected to have a material adverse effect on the business of Borrower and its consolidated Subsidiaries, taken as a whole.

(b) Obtain all of the Governmental Approvals necessary for the performance by Borrower of its obligations under the Loan Documents to which it is a party and the grant of a security interest to Bank in all of the Collateral. Borrower shall promptly provide copies of any such obtained Governmental Approvals to Bank.

6.2 Financial Statements, Reports, Certificates . Provide Bank with the following:

(a) Quarterly Financial Statements . As soon as available, but no later than fifteen (15) days after the deadline for filing, copies of all quarterly financial statements and reports, filed by Borrower with the SEC, any Governmental Authority succeeding to any or all of the functions of the SEC or with any national securities exchange, or distributed to its shareholders, as the case may be (the " **Quarterly Financial Statements** ");

(b) Monthly Compliance Certificate . Within fifteen (15) days after the last day of each month, a duly completed Compliance Certificate signed by a Responsible Officer, certifying that as of the end of such month, Borrower was in full compliance with all of the terms of this Agreement (or, if not, specifying any noncompliance), and setting forth calculations showing compliance with the financial covenants set forth in this Agreement and such other information as Bank may reasonably request;

(c) Annual Audited Financial Statements . As soon as available, but no later than fifteen (15) days after the deadline for filing, copies of all annual financial statements and reports, filed by Borrower with the SEC, any Governmental Authority succeeding to any or all of the functions of the SEC or with any national securities exchange, or distributed to its shareholders, as the case may be (the " **Annual Financial Statements** ");

(d) Form 8-Ks . Within five (5) days of filing by Borrower with the SEC, any Governmental Authority succeeding to any or all of the functions of the SEC or with any national securities exchange, copies of all Form 8-K statements which relate to any Subordinated Debt;

(e) SEC Filings . Within fifteen (15) days of after the deadline for filing, copies of all periodic and other reports, proxy statements and other materials filed by Borrower with the SEC, any Governmental Authority succeeding to any or all of the functions of the SEC or with any national securities exchange, or distributed to its shareholders, as the case may be. Documents required to be delivered pursuant to the terms hereof (to the extent any such documents are included in materials otherwise filed with the SEC) may be delivered electronically and if so delivered, shall be deemed to have been delivered by Borrower on the date on which Borrower posts such documents, or provides a link thereto, on Borrower's website on the Internet, at Borrower's website address. As to any information contained in the materials furnished pursuant to this clause (e), or otherwise provided on the Borrower's website on the internet Borrower shall not be required separately to furnish such information under clauses (a)

and (c), but such items shall be deemed to have been delivered to Bank pursuant to this Agreement, provided, however, the foregoing shall not be in derogation of the obligation of Borrower to furnish the information and materials described in such clauses (a) and (c) at the times specified therein.

(f) Legal Action Notice . A prompt report of any legal actions pending or threatened in writing against Borrower or any of its Subsidiaries that in the reasonable judgment of Borrower could reasonably be expected to result in damages or costs to Borrower or any of its Subsidiaries of, individually or in the aggregate, Two Million Dollars ($2,000,000) or more

(g) Banco Nacional Guaranty . Prompt notice of the occurrence of any event which permits the holder of the Banco Nacional Guaranty to demand payment or accelerate Borrower's Contingent Obligations under the Banco National Guaranty.

6.3 Taxes; Pensions . Timely file all required material tax returns and reports and timely pay all foreign, federal, state and local taxes, assessments, deposits and contributions owed by Borrower, except where the failure to do so would not reasonably be expected to have a material adverse effect on the financial condition or business of Borrower and its consolidated Subsidiaries, taken as a whole, and so long as Borrower posts bonds or takes any other steps required to prevent a Governmental Authority levying any contested taxes from obtaining a Lien upon any of the Collateral (other than a Lien allowed under clause (b) of the definition of Permitted Liens), and shall deliver to Bank, on demand, appropriate certificates attesting to such payments, and pay all amounts necessary to fund all present pension, profit sharing and deferred compensation plans in accordance with their terms, except to the extent the failure to so pay could reasonably be expected to result in any liability of Borrower, including any liability to the Pension Benefit Guaranty Corporation or its successors or any other governmental agency in the aggregate in excess of Five Hundred Thousand Dollars ($500,000).

6.4 Insurance .

(a) Keep its business and the Collateral insured for risks and in amounts standard for companies in Borrower's industry and location. Insurance policies shall be in a form, with financially sound and reputable insurance companies that are not Affiliates of Borrower. From and after a Springing Lien Event: (i) all property policies shall have a lender's loss payable endorsement showing Bank as an additional loss payee, (ii) all liability policies shall show, or have endorsements showing, Bank as an additional insured, and (iii) Bank shall be named as lender loss payee and/or additional insured with respect to any such insurance providing coverage in respect of any Collateral.

(b) From and after the Springing Lien Event, proceeds payable under any property policy are, at Bank's option, payable to Bank on account of the Obligations.

(c) At Bank's request, Borrower shall deliver certified copies of insurance policies and evidence of all premium payments. From and after a Springing Lien Event, each provider of any such insurance required under this Section 6.4 shall agree, by endorsement upon the policy or policies issued by it or by independent instruments furnished to Bank, that it will

give Bank thirty (30) days prior written notice before any such policy or policies shall be canceled (or, in the case of cancellation due to nonpayment, ten (10) days prior written notice). If Borrower fails to obtain insurance as required under this Section 6.4 or to pay any amount or furnish any required proof of payment to third persons and Bank, Bank may make all or part of such payment or obtain such insurance policies required in this Section 6.4, and take any action under the policies Bank deems prudent.

6.5 Operating Accounts .

(a) Provide Bank five (5) days prior written notice before establishing any domestic Collateral Account at or with any bank or financial institution other than Bank or Bank's Affiliates, provided, upon Bank's request, Borrower shall provide details of any of its foreign Collateral Accounts. Not later than March 31, 2017, Borrower shall maintain certain of its primary operating accounts with Bank and Bank's Affiliates.

(b) Immediately upon the occurrence of a Springing Lien Event, for each Collateral Account that Borrower at any time maintains, Borrower shall cause the applicable bank or financial institution (other than Bank) at or with which any Collateral Account is maintained to execute and deliver a Control Agreement or other appropriate instrument with respect to such Collateral Account to perfect Bank's Lien in such Collateral Account in accordance with the terms hereunder and to establish Bank's control over such Collateral Account, which Bank agrees not to exercise until an Event of Default has occurred and is continuing, and which Control Agreement may not be terminated without the prior written consent of Bank. The provisions of the previous sentence shall not apply to: (i) deposit accounts exclusively used for payroll, payroll taxes and other employee wage and benefit payments to or for the benefit of Borrower's employees and identified to Bank by Borrower as such, (ii) foreign Collateral Accounts, (iii) accounts specified in the "Excluded Assets" definition, and (iv) Permitted Pledged Accounts.

6.6 Financial Covenants .

(a) Designated Deposit Account Balance . Maintain at all times in the Designated Deposit Account with Bank, available balances of not less than one hundred ten percent (110%) of the Dollar Equivalent of the face amount of all outstanding Letters of Credit (including drawn but unreimbursed Letters of Credit).

(b) Investment Management Account . In addition to the amounts maintained pursuant to Section 6.6(a) of this Agreement, maintain at all times not less than Twenty Million Dollars ($20,000,000) in an investment management account maintained or a deposit account with Bank.

6.7 Future Letters of Credit and Foreign Exchange . Utilize Bank and its Affiliates as the primary issuer and processor of all standby and commercial letters of credit and afford Bank the opportunity to bid on all foreign exchange transactions which involve Borrower.

6.8 Protection of Intellectual Property Rights . Use reasonable efforts to (i) protect, defend and maintain the validity and enforceability of its Intellectual Property, to the extent the failure to so protect, defend or maintain would reasonably be expected to have a material adverse effect on the financial condition or business of the Borrower and its consolidated Subsidiaries, taken as a whole; (ii) promptly advise Bank in writing of material infringements of which Borrower is aware of its Intellectual Property; and (iii) not allow any Intellectual Property material to Borrower's business to be abandoned, forfeited or dedicated to the public without Bank's written consent.

6.9 Litigation Cooperation . From the date hereof and continuing through the termination of this Agreement, make available to Bank, without expense to Bank, Borrower and its officers and employees and Borrower's books and records, to the extent that Bank may deem them reasonably necessary to prosecute or defend any third-party suit or proceeding instituted by or against Bank with respect to any Collateral or relating to Borrower.

6.10 Access to Collateral; Books and Records . Allow Bank, or its agents, to inspect the Collateral and audit and copy Borrower's Books, provided that so long as no Event of Default has occurred and continuing, such inspections and audits shall not occur more frequently than one time in any twelve (12) month period and Bank shall provide Borrower with not less than three (3) Business Days' prior notice of any such inspection. The foregoing inspections and audits shall be at Borrower's expense, and the charge therefor shall be $1,000 per person per day (or such higher amount as shall represent Bank's then-current standard charge for the same), plus reasonable out-of-pocket expenses.

6.11 Mergers and Acquisitions . Provide at least ten (10) days prior written notice to Bank in advance of consummating any transaction permitted pursuant to Section 7.3 of this Agreement, which notice shall include a reasonably detailed description of such transaction, and such other financial information, financial analysis, documentation or other information relating to such transaction as Bank shall reasonably request

6.12 Further Assurances . Execute any further instruments and take further action as Bank reasonably requests to perfect or continue Bank's Lien in the Collateral or to effect the purposes of this Agreement.

7. NEGATIVE COVENANTS

Borrower shall not do any of the following without Bank's prior written consent:

7.1 Dispositions . Convey, sell, lease, transfer, assign, or otherwise dispose of (collectively, " **Transfer** "), or permit any of its Subsidiaries to Transfer, all or any part of its business or property, except for Transfers (a) in the ordinary course of business for reasonably equivalent consideration; (b) of Inventory in the ordinary course of business; (c) of Equipment that is no longer used or useful, (d) of Equipment which is exchanged for other Equipment; (e) in connection with Permitted Liens and Permitted Investments, (f) of the Peoria Assets, (g) to Borrower or any of its Subsidiaries from Borrower or any of its Subsidiaries; (h) of property in connection with sale leaseback transactions, (i) of property to the extent such property is

exchanged for credit against, or proceeds are promptly applied to, the purchase price of other property used or useful in the business of Borrower or its Subsidiaries; (j) (1) constituting licenses of Intellectual Property of Borrower or its Subsidiaries and (2) contributions of Intellectual Property to joint ventures; (k) otherwise permitted by the Loan Documents, (l) sales or discounting of delinquent accounts in the ordinary course of business; (m) in connection with a permitted acquisition of a portion of the assets or rights acquired (n) of the Algenist Assets and (o) of assets not described in the foregoing clauses (a) through (n) in an amount not to exceed One Million Dollars ($1,000,000) in the aggregate in any fiscal year of Borrower. Upon any sale or other Transfer by Borrower of any Collateral in a transaction permitted under this Section, the security interest in such Collateral granted hereunder shall be automatically released.

7.2 Changes in Business, Control, or Business Locations . (a) Engage in or permit any of its Subsidiaries to engage in any business other than the businesses currently engaged in by Borrower and such Subsidiary, as applicable, or reasonably related thereto; (b) liquidate or dissolve, except in the case of Subsidiaries; or (c) permit or suffer any Change in Control.

Borrower shall not, without at least thirty (30) days prior written notice to Bank: (1) change its jurisdiction of organization, (2) change its organizational structure or type, (3) change its legal name, or (4) change any organizational number assigned by its jurisdiction of organization.

After the occurrence of any Springing Lien Event, at Bank's request Borrower shall promptly provide Bank with an updated Perfection Certificate and after receipt thereof, Bank may require that Borrower not, without at least fifteen (15) days prior written notice to Bank, add any new offices or business locations, including warehouses (unless such new offices or business locations contain less than Five Hundred Thousand Dollars ($500,000) in Borrower's assets or property) or deliver any portion of the Collateral valued, individually or in the aggregate, in excess of Five Hundred Thousand Dollars ($500,000) to a bailee at a location other than to a bailee and at a location already disclosed in the Perfection Certificate.

7.3 Mergers or Acquisitions . Merge or consolidate, or permit any of its Subsidiaries to merge or consolidate, with any other Person, or acquire, or permit any of its Subsidiaries to acquire, all or substantially all of the capital stock or property of a Person except where:

(a) where no Event of Default has occurred and is continuing or would result from such action during the term of this Agreement and Borrower is the surviving entity;

(b) Borrower or a Subsidiary may acquire all or substantially all of the capital stock or property of another Person so long as no Event of Default has occurred and is continuing at the time of such acquisition or would result from such action, including pursuant to a merger or consolidation, and for all such transactions involving Borrower, Borrower is the surviving entity;

(c) any Subsidiary may merge or consolidate with (i) Borrower provided that Borrower is the surviving entity, and (ii) one or more other Subsidiaries;

(d) Borrower or any Subsidiary may acquire, all or substantially all of the capital stock or property of another Subsidiary;

(e) if the target is not merged with and into Borrower then (unless Bank agrees otherwise), substantially simultaneously with the closing of the Permitted Acquisition the target must become an obligor under this Agreement and the other Loan Documents and become subject to all rights and obligations of this Agreement and the other Loan Documents, and must execute and deliver to Bank an assumption agreement acceptable to Bank as well as such other documents and agreements as required by Bank in connection with the target becoming an obligor and after a Springing Lien Event granting a Lien in favor of Bank on its assets that constitute Collateral; and

(f) such merger, consolidation or acquisition is a Transfer otherwise permitted pursuant to Section 7.1.

7.4 Indebtedness . Create, incur, assume, or be liable for any Indebtedness, or permit any Subsidiary to do so, other than Permitted Indebtedness.

7.5 Encumbrance . Create, incur, allow, or suffer any Lien on any of the Collateral, including at all times the Springing Collateral, or assign or convey any right to receive income, including the sale of any Accounts, or permit any of its Subsidiaries to do so, except for Permitted Liens, permit any Collateral not to be subject to the first priority security interest granted herein, except for Permitted Liens, or enter into any agreement, document, instrument or other arrangement (except with or in favor of Bank) with any Person which directly or indirectly prohibits or has the effect of prohibiting Borrower from assigning, mortgaging, pledging, granting a security interest in or upon, or encumbering any of the Collateral and Borrower's Intellectual Property, except as is otherwise permitted in Section 7.1 hereof and the definition of "Permitted Liens" herein.

7.6 Maintenance of Collateral Accounts . Maintain any Collateral Account except pursuant to the terms of Section 6.5(b) hereof.

7.7 Distributions; Investments . (a) Pay any dividends or make any distribution or payment or redeem, retire or purchase any capital stock of Borrower, other than Permitted Distributions; or (b) directly or indirectly make any Investment in any Person other than Permitted Investments, or permit any of its Subsidiaries to do so.

7.8 Transactions with Affiliates . Directly or indirectly enter into or permit to exist any material transaction with any Affiliate of Borrower, except for transactions that are (a) upon fair and reasonable terms that are no less favorable to Borrower than would be obtained in an arm's length transaction with a non-affiliated Person, (b) between or among Borrower and its Subsidiaries, (c) Permitted Distributions, (d)Permitted Investments, (e) issuances by Borrower of its capital stock and receipt by Borrower of capital contributions, (f) legal, accounting, administrative and other support services provided to joint ventures, (g) compensation and indemnification of, and other employment arrangements with directors, officers and employees of Borrower or any of its Subsidiaries entered into in the ordinary course of business and (h)

described in "Certain Relationships and Related Party Transactions" in Borrower's most recent Form 10-K on file with the SEC.

7.9 Subordinated Debt . (a) Make or permit any payment on any Subordinated Debt, except under the terms of the subordination, intercreditor, or other similar agreement to which such Subordinated Debt is subject, or (b) amend any provision in any document relating to the Subordinated Debt in existence as of the Effective Date which would cause the aggregate principal amount of Subordinated Debt outstanding to exceed the aggregate principal amount of Subordinated Debt outstanding on the Effective Date or adversely affect the subordination thereof to Obligations owed to Bank.

7.10 Compliance . Become an "investment company" or a company controlled by an "investment company", under the Investment Company Act of 1940, as amended, or undertake as one of its important activities extending credit to purchase or carry margin stock (as defined in Regulation U of the Board of Governors of the Federal Reserve System), or use the proceeds of any Credit Extension for that purpose; (a) fail to meet the minimum funding requirements of ERISA, (b) permit a Reportable Event or Prohibited Transaction, as defined in ERISA, to occur, or (c) fail to comply with the Federal Fair Labor Standards Act, the occurrence of any of the conditions described in clauses (a)through (c) which could reasonably be expected to have a material adverse effect on the business of the Borrower and its consolidated Subsidiaries, taken as a whole; or violate any other law or regulation, if the violation could reasonably be expected to have a material adverse effect on the business of Borrower and its consolidated Subsidiaries, taken as a whole, or permit any of its Subsidiaries to do so; withdraw or permit any Subsidiary to withdraw from participation in, permit partial or complete termination of, or permit the occurrence of any other event with respect to, any present pension, profit sharing and deferred compensation plan which could reasonably be expected to result in any liability of Borrower, including any liability to the Pension Benefit Guaranty Corporation or its successors or any other governmental agency in the aggregate in excess of Five Million Dollars ($5,000,000).

8. EVENTS OF DEFAULT

Any one of the following shall constitute an event of default (an "Event of Default") under this Agreement:

8.1 Payment Default . Borrower fails to (a) make any payment of principal or interest on any Credit Extension when due, or (b) pay any other Obligations within three (3) Business Days after such Obligations are due and payable. During the cure period, the failure to make or pay any payment specified under clause (b) hereunder is not an Event of Default (but no Credit Extension will be made during the cure period);

8.2 Covenant Default .

(a) Borrower violates any covenant in Section 7;

(b) Borrower fails or neglects to perform any obligations in Section 6.6 within three (3) Business Days of when due,

(c) Borrower fails or neglects to perform any obligations in Sections 6.2, 6.3, 6.4, 6.5, or 6.10 within five (5) days of when due, or

(d) Borrower fails or neglects to perform, keep, or observe any other term, provision, condition, covenant or agreement contained in this Agreement or any Loan Documents, and as to any default (other than those specified in this Section 8) under such other term, provision, condition, covenant or agreement that can be cured, has failed to cure the default within ten (10) days after the occurrence thereof; provided, however, that if the default cannot by its nature be cured within the ten (10) day period or cannot after diligent attempts by Borrower be cured within such ten (10) day period, and such default is likely to be cured within a reasonable time, then Borrower shall have an additional period (which shall not in any case exceed thirty (30) days) to attempt to cure such default, and within such reasonable time period the failure to cure the default shall not be deemed an Event of Default (but no Credit Extensions shall be made during such cure period). Cure periods provided under this section shall not apply, among other things, to financial covenants or any other covenants set forth in clause (a) above;

8.3 Material Adverse Change . A Material Adverse Change occurs;

8.4 Attachment; Levy; Restraint on Business .

(a) (i) The service of process seeking to attach, by trustee or similar process, any funds of Borrower or of any entity under the control of Borrower (including a Subsidiary) in excess of One Million Dollars ($1,000,000), or (ii) a notice of lien or levy (other than a Lien allowed under clause (b) of the definition of Permitted Liens) is filed against any of Borrower's assets by any Governmental Authority, and the same under subclauses (i) and (ii) hereof are not, within ten (10) days after the occurrence thereof, discharged or stayed (whether through the posting of a bond or otherwise); provided, however, no Credit Extensions shall be made during any ten (10) day cure period; or

(b) (i) any material portion of Borrower's assets is attached, seized, levied on, or comes into possession of a trustee or receiver, or (ii) any court order enjoins, restrains, or prevents Borrower from conducting all or any material part of its business;

8.5 Insolvency . (a) Borrower fails to be solvent as described under Section 5.5 hereof; (b) Borrower begins an Insolvency Proceeding; or (c) an Insolvency Proceeding is begun against Borrower and is not dismissed or stayed within forty-five (45) days (but no Credit Extensions shall be made while any of the conditions described in clause (a) exist and/or until any Insolvency Proceeding is dismissed);

8.6 Other Agreements . There is, under any agreement to which Borrower is a party with a third party or parties, any default resulting in a right by such third party or parties, whether or not exercised, to accelerate the maturity of any Indebtedness in an amount individually or in the aggregate in excess of Five Million Dollars ($5,000,000);

8.7 Banco Nacional Guaranty . The occurrence of any event which permits the holder of the Banco Nacional Guaranty to demand payment or accelerate Borrower's Contingent Obligations under the Banco National Guaranty.

8.8 Judgments; Penalties . One or more fines, penalties or final judgments, orders or decrees for the payment of money in an amount, individually or in the aggregate, in excess of Two Million Five Hundred Thousand Dollars ($2,500,000) (not covered by independent third-party insurance as to which liability has been accepted by such insurance carrier) shall be rendered against Borrower, and the same are not, within ten (10) days after the entry, assessment or issuance thereof, discharged, satisfied, or paid, or after execution thereof, stayed or bonded pending appeal, or such judgments are not discharged prior to the expiration of any such stay (provided that no Credit Extensions will be made prior to the satisfaction, payment, discharge, stay, or bonding of such fine, penalty, judgment, order or decree);

8.9 Misrepresentations . Borrower makes any representation, warranty, or other statement now or later in this Agreement, any Loan Document or in any writing or electronic materials, including without limitation, filings made with the SEC that are required to be provided to Bank pursuant to Section 6.2 of this Agreement, delivered to Bank or to induce Bank to enter this Agreement or any Loan Document, and such representation, warranty, or other statement is incorrect in any material respect when made;

8.10 Subordinated Debt . Any subordination provisions under any document, instrument, or agreement evidencing any Subordinated Debt shall for any reason be revoked or invalidated or otherwise cease to be in full force and effect, any Person shall be in breach thereof or contest in any manner the validity or enforceability thereof or deny that it has any further liability or obligation thereunder, or the Obligations shall for any reason be subordinated or shall not have the priority contemplated by this Agreement.

8.11 Indenture . There is a default or an event of default under the Indenture, or any subordination provisions under the Indenture shall for any reason be revoked, invalidated, otherwise deemed not to be effective or in full force and effect with respect to the Obligations, any Person shall be in breach of the subordination provisions of the Indenture or contest in any manner the validity or enforceability thereof or deny that the Obligations constitute "Senior Debt" thereunder, or the Obligations shall for any reason be subordinated or shall not have the priority as "Senior Debt" under the Indenture.

9. BANK'S RIGHTS AND REMEDIES

9.1 Rights and Remedies . Upon the occurrence and during the continuance of an Event of Default, Bank may, without notice or demand, do any or all of the following:

(a) declare all Obligations immediately due and payable (but if an Event of Default described in Section 8.5 occurs all Obligations are immediately due and payable without any action by Bank);

(b) stop advancing money or extending credit for Borrower's benefit under this Agreement or under any other agreement between Borrower and Bank;

(c) after a Springing Lien Event, demand payment of and collect any Accounts, settle or adjust disputes and claims directly with Account Debtors for amounts on terms and in any order that Bank considers advisable, and notify any Person owing Borrower money of Bank's security interest in such funds and verify the amount of such Account;

(d) make any payments and do any acts it considers necessary or reasonable to protect the Collateral and/or its security interest in the Collateral including, without limitation, perfecting Bank's security interest in Borrower's Springing Collateral. Borrower shall assemble the Collateral if Bank requests and make it available as Bank designates. Bank may enter premises where the Collateral is located, take and maintain possession of any part of the Collateral, and pay, purchase, contest, or compromise any Lien which appears to be prior or superior to its security interest and pay all expenses incurred. Borrower grants Bank a license to enter and occupy any of its premises, without charge, to exercise any of Bank's rights or remedies;

(e) apply to the Obligations any (i) balances and deposits of Borrower it holds, or (ii) any amount held by Bank owing to or for the credit or the account of Borrower;

(f) ship, reclaim, recover, store, finish, maintain, repair, prepare for sale, advertise for sale, and sell the Collateral. Bank is hereby granted a non-exclusive, royalty-free license or other right to use, without charge, Borrower's labels, Patents, Copyrights, mask works, rights of use of any name, trade secrets, trade names, Trademarks, and advertising matter, or any similar property as it pertains to the Collateral, in completing production of, advertising for sale, and selling any Collateral and, in connection with Bank's exercise of its rights under this Section, Borrower's rights under all licenses and all franchise agreements inure to Bank's benefit;

(g) place a "hold" on any account maintained with Bank and/or deliver a notice of exclusive control, any entitlement order, or other directions or instructions pursuant to any Control Agreement or similar agreements providing control of any Collateral;

(h) demand and receive possession of Borrower's Books constituting Collateral;

(i) exercise all rights and remedies available to Bank under the Loan Documents or at law or equity, including all remedies provided under the Code (including disposal of the Collateral pursuant to the terms thereof); and

(j) transfer cash in an amount equal to 110% of the Dollar Equivalent of the then outstanding Obligations, including, the face amount of all outstanding Letters of Credit (including drawn but unreimbursed Letters of Credit) from the cash maintained by Borrower with Bank, pursuant to Section 6.6(a) of this Agreement, into one or more restricted or blocked accounts maintained with Bank; provided that in the event the cash maintained in the Designated Deposit Account pursuant to Section 6.6(a) does not equal at least 110% of the Dollar Equivalent

of the then outstanding Obligations, including, the face amount of all outstanding Letters of Credit (including drawn but unreimbursed Letters of Credit), Bank shall be permitted to transfer amounts from the investment management account or deposit account maintained in accordance with Section 6.6(b) of this Agreement in the amount of such difference into one or more restricted or blocked accounts maintained with Bank.

9.2 Power of Attorney . Borrower hereby irrevocably appoints Bank as its lawful attorney-in-fact, exercisable upon the occurrence and during the continuance of an Event of Default, to: (a) endorse Borrower's name on any checks or other forms of payment or security; (b) sign Borrower's name on any invoice or bill of lading for any Account or drafts against Account Debtors; (c) settle and adjust disputes and claims about the Accounts directly with Account Debtors, for amounts and on terms Bank determines reasonable; (d) make, settle, and adjust all claims under Borrower's insurance policies; (e) pay, contest or settle any Lien, charge, encumbrance, security interest, and adverse claim in or to the Collateral, or any judgment based thereon, or otherwise take any action to terminate or discharge the same; and (f) transfer the Collateral into the name of Bank or a third party as the Code permits. Borrower hereby appoints Bank as its lawful attorney-in-fact to sign Borrower's name on any documents necessary to perfect or continue the perfection of Bank's security interest in the Collateral until all Obligations have been satisfied in full (other than inchoate indemnity obligations) and Bank is under no further obligation to make Credit Extensions hereunder. Bank's foregoing appointment as Borrower's attorney in fact, and all of Bank's rights and powers, coupled with an interest, are irrevocable until all Obligations have been fully repaid and performed (other than inchoate indemnity obligations) and Bank's obligation to provide Credit Extensions terminates.

9.3 Protective Payments . If Borrower fails to obtain the insurance called for by Section 6.4 or fails to pay any premium thereon or fails to pay any other amount which Borrower is obligated to pay under this Agreement or any other Loan Document, Bank may obtain such insurance or make such payment, and all amounts so paid by Bank are Bank Expenses and immediately due and payable, bearing interest at the then highest rate applicable to the Obligations, and secured by the Collateral. Bank will make reasonable efforts to provide Borrower with notice of Bank obtaining such insurance at the time it is obtained or within a reasonable time thereafter. No payments by Bank are deemed an agreement to make similar payments in the future or Bank's waiver of any Event of Default.

9.4 Application of Payments and Proceeds Upon Default . If an Event of Default has occurred and is continuing, Bank shall have the right to apply in any order any funds in its possession, whether from Borrower account balances, payments, proceeds realized as the result of any collection of Accounts or other disposition of the Collateral, or otherwise, to the Obligations. Bank shall pay any surplus to Borrower by credit to the Designated Deposit Account or to other Persons legally entitled thereto; Borrower shall remain liable to Bank for any deficiency. If Bank, in good faith, directly or indirectly, enters into a deferred payment or other credit transaction with any purchaser at any sale of Collateral, Bank shall have the option, exercisable at any time, of either reducing the Obligations by the principal amount of the purchase price or deferring the reduction of the Obligations until the actual receipt by Bank of cash therefor.

9.5 Bank's Liability for Collateral . So long as Bank complies with reasonable banking practices regarding the safekeeping of the Collateral in the possession or under the control of Bank, Bank shall not be liable or responsible for: (a) the safekeeping of the Collateral; (b) any loss or damage to the Collateral; (c) any diminution in the value of the Collateral; or (d) any act or default of any carrier, warehouseman, bailee, or other Person. Borrower bears all risk of loss, damage or destruction of the Collateral.

9.6 No Waiver; Remedies Cumulative . Bank's failure, at any time or times, to require strict performance by Borrower of any provision of this Agreement or any other Loan Document shall not waive, affect, or diminish any right of Bank thereafter to demand strict performance and compliance herewith or therewith. No waiver hereunder shall be effective unless signed by the party granting the waiver and then is only effective for the specific instance and purpose for which it is given. Bank's rights and remedies under this Agreement and the other Loan Documents are cumulative. Bank has all rights and remedies provided under the Code, by law, or in equity. Bank's exercise of one right or remedy is not an election and shall not preclude Bank from exercising any other remedy under this Agreement or other remedy available at law or in equity, and Bank's waiver of any Event of Default is not a continuing waiver. Bank's delay in exercising any remedy is not a waiver, election, or acquiescence.

9.7 Demand Waiver . Borrower waives demand, notice of default or dishonor, notice of payment and nonpayment, notice of any default, nonpayment at maturity, release, compromise, settlement, extension, or renewal of accounts, documents, instruments, chattel paper, and guarantees held by Bank on which Borrower is liable.

10. NOTICES

All notices, consents, requests, approvals, demands, or other communication by any party to this Agreement or any other Loan Document must be in writing and shall be deemed to have been validly served, given, or delivered: (a) upon the earlier of actual receipt and three (3) Business Days after deposit in the U.S. mail, first class, registered or certified mail return receipt requested, with proper postage prepaid; (b) upon transmission, when sent by electronic mail or facsimile transmission; (c) one (1) Business Day after deposit with a reputable overnight courier with all charges prepaid; or (d) when delivered, if hand-delivered by messenger, all of which shall be addressed to the party to be notified and sent to the address, facsimile number, or email address indicated below. Bank or Borrower may change its mailing or electronic mail address or facsimile number by giving the other party written notice thereof in accordance with the terms of this Section 10.

If to Borrower: TerraVia Holdings, Inc.
225 Gateway Blvd.
South San Francisco, California 94080
Attn: Bryce Dille
Fax: 650-989-6700
Email: info@terravia.com

If to Bank: Silicon Valley Bank
555 Mission Street, Suite 900
San Francisco, California 94105
Attn: Mona Maitra , Vice President – Energy & Resource Innovation
Email: mmaitra@svb.com

11. CHOICE OF LAW, VENUE, JURY TRIAL WAIVER AND JUDICIAL REFERENCE

Except as otherwise expressly provided in any of the Loan Documents, California law governs the Loan Documents without regard to principles of conflicts of law. Borrower and Bank each submit to the exclusive jurisdiction of the State and Federal courts in Santa Clara County, California; provided, however, that nothing in this Agreement shall be deemed to operate to preclude Bank from bringing suit or taking other legal action in any other jurisdiction to realize on the Collateral or any other security for the Obligations, or to enforce a judgment or other court order in favor of Bank. Borrower expressly submits and consents in advance to such jurisdiction in any action or suit commenced in any such court, and Borrower hereby waives any objection that it may have based upon lack of personal jurisdiction, improper venue, or forum non conveniens and hereby consents to the granting of such legal or equitable relief as is deemed appropriate by such court. Borrower hereby waives personal service of the summons, complaints, and other process issued in such action or suit and agrees that service of such summons, complaints, and other process may be made by registered or certified mail addressed to Borrower at the address set forth in, or subsequently provided by Borrower in accordance with, Section 10 of this Agreement and that service so made shall be deemed completed upon the earlier to occur of Borrower's actual receipt thereof or three (3) days after deposit in the U.S. mails, proper postage prepaid.

TO THE FULLEST EXTENT PERMITTED BY APPLICABLE LAW, BORROWER AND BANK EACH WAIVE THEIR RIGHT TO A JURY TRIAL OF ANY CLAIM OR CAUSE OF ACTION ARISING OUT OF OR BASED UPON THIS AGREEMENT, THE LOAN DOCUMENTS OR ANY CONTEMPLATED TRANSACTION, INCLUDING CONTRACT, TORT, BREACH OF DUTY AND ALL OTHER CLAIMS. THIS WAIVER IS A MATERIAL INDUCEMENT FOR BOTH PARTIES TO ENTER INTO THIS AGREEMENT. EACH PARTY HAS REVIEWED THIS WAIVER WITH ITS COUNSEL.

WITHOUT INTENDING IN ANY WAY TO LIMIT THE PARTIES' AGREEMENT TO WAIVE THEIR RESPECTIVE RIGHT TO A TRIAL BY JURY, if the above waiver of the right to a trial by jury is not enforceable, the parties hereto agree that any and all disputes or controversies of any nature between them arising at any time shall be decided by a reference to a private judge, mutually selected by the parties (or, if they cannot agree, by the Presiding Judge of the Santa Clara County, California Superior Court) appointed in accordance with California Code of Civil Procedure Section 638 (or pursuant to comparable provisions of federal law if the dispute falls within the exclusive jurisdiction of the federal courts), sitting without a jury, in Santa Clara County, California; and the parties hereby submit to the jurisdiction of such court. The reference proceedings shall be conducted pursuant to and in accordance with the provisions of California Code of Civil Procedure

§§ 638 through 645.1, inclusive. The private judge shall have the power, among others, to grant provisional relief, including without limitation, entering temporary restraining orders, issuing preliminary and permanent injunctions and appointing receivers. All such proceedings shall be closed to the public and confidential and all records relating thereto shall be permanently sealed. If during the course of any dispute, a party desires to seek provisional relief, but a judge has not been appointed at that point pursuant to the judicial reference procedures, then such party may apply to the Santa Clara County, California Superior Court for such relief. The proceeding before the private judge shall be conducted in the same manner as it would be before a court under the rules of evidence applicable to judicial proceedings. The parties shall be entitled to discovery which shall be conducted in the same manner as it would be before a court under the rules of discovery applicable to judicial proceedings. The private judge shall oversee discovery and may enforce all discovery rules and orders applicable to judicial proceedings in the same manner as a trial court judge. The parties agree that the selected or appointed private judge shall have the power to decide all issues in the action or proceeding, whether of fact or of law, and shall report a statement of decision thereon pursuant to California Code of Civil Procedure § 644(a). Nothing in this paragraph shall limit the right of any party at any time to exercise self-help remedies, foreclose against collateral, or obtain provisional remedies. The private judge shall also determine all issues relating to the applicability, interpretation, and enforceability of this paragraph.

This Section 11 shall survive the termination of this Agreement.

12. GENERAL PROVISIONS

12.1 Termination Prior to Letter of Credit Expiration Date; Survival . All covenants, representations and warranties made in this Agreement continue in full force until this Agreement has terminated pursuant to its terms and all Obligations (other than inchoate indemnity obligations and any other obligations which, by their terms, are to survive the termination of this Agreement) have been satisfied. So long as Borrower has satisfied the Obligations (other than inchoate indemnity obligations, any other obligations which, by their terms, are to survive the termination of this Agreement, and any Obligations under Bank Services Agreements that are cash collateralized in accordance with Section 4.1 of this Agreement), this Agreement may be terminated prior to the Letter of Credit Expiration Date by Borrower, effective three (3) Business Days after written notice of termination is given to Bank. Those obligations that are expressly specified in this Agreement as surviving this Agreement's termination shall continue to survive notwithstanding this Agreement's termination.

12.2 Successors and Assigns . This Agreement binds and is for the benefit of the successors and permitted assigns of each party. Borrower may not assign this Agreement or any rights or obligations under it without Bank's prior written consent (which may be granted or withheld in Bank's discretion). Bank has the right, without the consent but with prompt notice to Borrower, to sell, transfer, assign, negotiate, or grant participation in all or any part of, or any interest in, Bank's obligations, rights, and benefits under this Agreement and the other Loan Documents. Notwithstanding the foregoing, prior to the occurrence of an Event of Default, Bank shall not assign any interest in the Loan Documents to an operating company which is also a direct competitor of Borrower and, if any such assignment is made after an Event of Default, will

provide Borrower with prompt notice of any such assignment. No transferee or assignee shall be entitled to receive any greater payment under Section 2.5 with respect to any transferred interest than the assignor or transferor would have been entitled to receive, except to the extent such entitlement to receive a greater payment results from a Chang in Law that occurs after the transferee or assignee acquired the applicable interest.

12.3 Indemnification .

(a) General Indemnification . Borrower agrees to indemnify, defend and hold Bank and its directors, officers, employees, agents, attorneys, or any other Person affiliated with or representing Bank (each, an " **Indemnified Person** ") harmless against: (i) all obligations, demands, claims, and liabilities (collectively, " **Claims** ") claimed or asserted by any other party in connection with the transactions contemplated by the Loan Documents; and (ii) all losses or expenses (including Bank Expenses) in any way suffered, incurred, or paid by such Indemnified Person as a result of, following from, consequential to, or arising from transactions between Bank and Borrower (including reasonable attorneys' fees and expenses), except for Claims and/or losses directly caused by such Indemnified Person's gross negligence or willful misconduct.

(b) **Judgment Currency; Currency Indemnification** . If, for the purposes of obtaining judgment in any court, it is necessary to convert a sum due hereunder or any other Loan Document in one currency into another currency, the rate of exchange used shall be that at which in accordance with normal banking procedures Bank could purchase the first currency with such other currency on the Business Day preceding that on which final judgment is given. The obligation of Borrower with respect to any such sum due from it to Bank hereunder or under any other Loan Document shall, notwithstanding any judgment in a currency (the " **Judgment Currency** ") other than that in which such sum is denominated in accordance with the applicable provisions of this Agreement (the " **Agreement Currency** "), be discharged only to the extent that on the Business Day following receipt by Bank of any sum adjudged to be so due in the Judgment Currency, Bank may in accordance with normal banking procedures purchase the Agreement Currency with the Judgment Currency. If the amount of the Agreement Currency so purchased is less than the sum originally due to Bank from Borrower in the Agreement Currency, Borrower agrees, as a separate obligation and notwithstanding any such judgment, to indemnify Bank against such loss. If the amount of the Agreement Currency so purchased is greater than the sum originally due to Bank in such currency, Bank agrees to return the amount of any excess to Borrower (or to any other Person who may be entitled thereto under applicable law).

This Section 12.3 shall survive until all statutes of limitation with respect to the Claims, losses, and expenses for which indemnity is given shall have run.

This Section 12.3 shall not apply with respect to taxes, other than any taxes that represent losses, claims, damages, etc. arising from any non-tax claim. For the avoidance of doubt, this Section 12.3 shall not limit the application of Section 2.5.

12.4 Time of Essence . Time is of the essence for the performance of all Obligations in this Agreement.

12.5 Severability of Provisions . Each provision of this Agreement is severable from every other provision in determining the enforceability of any provision.

12.6 Correction of Loan Documents . Bank may correct patent errors and fill in any blanks in the Loan Documents consistent with the agreement of the parties so long as Bank provides Borrower with written notice of such correction and allows Borrower at least ten (10) days to object to such correction. In the event of such objection, such correction shall not be made except by an amendment signed by both Bank and Borrower.

12.7 Amendments in Writing; Waiver; Integration . No purported amendment or modification of any Loan Document, or waiver, discharge or termination of any obligation under any Loan Document, shall be enforceable or admissible unless, and only to the extent, expressly set forth in a writing signed by the party against which enforcement or admission is sought. Without limiting the generality of the foregoing, no oral promise or statement, nor any action, inaction, delay, failure to require performance or course of conduct shall operate as, or evidence, an amendment, supplement or waiver or have any other effect on any Loan Document. Any waiver granted shall be limited to the specific circumstance expressly described in it, and shall not apply to any subsequent or other circumstance, whether similar or dissimilar, or give rise to, or evidence, any obligation or commitment to grant any further waiver. The Loan Documents represent the entire agreement about this subject matter and supersede prior negotiations or agreements. All prior agreements, understandings, representations, warranties, and negotiations between the parties about the subject matter of the Loan Documents merge into the Loan Documents.

12.8 Counterparts . This Agreement may be executed in any number of counterparts and by different parties on separate counterparts, each of which, when executed and delivered, is an original, and all taken together, constitute one Agreement.

12.9 Confidentiality . In handling any confidential information, Bank shall exercise the same degree of care that it exercises for its own proprietary information, but disclosure of information may be made: (a) to Bank's Subsidiaries or Affiliates (such Subsidiaries and Affiliates, together with Bank, collectively, **"Bank Entities** ") provided that such Subsidiaries or Affiliates shall be required to keep such information confidential in accordance with the terms hereof; (b) to prospective transferees or purchasers of any interest in the Credit Extensions (provided, however, Bank shall use its best efforts to obtain any prospective transferee's or purchaser's agreement to the terms of this provision); (c) as required by law, regulation, subpoena, or other order; (d) to Bank's regulators or as otherwise required in connection with Bank's examination or audit; (e) as Bank considers appropriate in exercising remedies under the Loan Documents; and (f) to third-party service providers of Bank so long as such service providers have executed a confidentiality agreement with Bank with terms no less restrictive than those contained herein. Confidential information does not include information that is either: (i) in the public domain or in Bank's possession when disclosed to Bank, or becomes part of the public domain (other than as a result of its disclosure by Bank in violation of this Agreement) after disclosure to Bank; or (ii) disclosed to Bank by a third party, if Bank does not know that the third party is prohibited from disclosing the information.

Bank Entities may use the confidential information for reporting purposes and the development and distribution of databases and market analyses so long as such confidential information is aggregated and anonymized prior to distribution unless otherwise expressly prohibited by Borrower. The provisions of the immediately preceding sentence shall survive the termination of this Agreement.

12.10 Attorneys' Fees, Costs and Expenses . In any action or proceeding between Borrower and Bank arising out of or relating to the Loan Documents, the prevailing party shall be entitled to recover its reasonable attorneys' fees and other costs and expenses incurred, in addition to any other relief to which it may be entitled. After a Springing Lien Event, Borrower shall be responsible for all fees and disbursements incurred by Bank in connection with any appraisals of any Springing Collateral, field examinations or other business analysis conducted by any third parties in connection with this Agreement or any Loan Documents.

12.11 Electronic Execution of Documents . The words "execution," "signed," "signature" and words of like import in any Loan Document shall be deemed to include electronic signatures or the keeping of records in electronic form, each of which shall be of the same legal effect, validity and enforceability as a manually executed signature or the use of a paper-based recordkeeping systems, as the case may be, to the extent and as provided for in any applicable law, including, without limitation, any state law based on the Uniform Electronic Transactions Act.

12.12 Captions . The headings used in this Agreement are for convenience only and shall not affect the interpretation of this Agreement.

12.13 Construction of Agreement . The parties mutually acknowledge that they and their attorneys have participated in the preparation and negotiation of this Agreement. In cases of uncertainty this Agreement shall be construed without regard to which of the parties caused the uncertainty to exist.

12.14 Relationship . The relationship of the parties to this Agreement is determined solely by the provisions of this Agreement. The parties do not intend to create any agency, partnership, joint venture, trust, fiduciary or other relationship with duties or incidents different from those of parties to an arm's-length contract.

12.15 Third Parties . Nothing in this Agreement, whether express or implied, is intended to: (a) confer any benefits, rights or remedies under or by reason of this Agreement on any persons other than the express parties to it and their respective permitted successors and assigns; (b) relieve or discharge the obligation or liability of any person not an express party to this Agreement; or (c) give any person not an express party to this Agreement any right of subrogation or action against any party to this Agreement.

12.16 Senior Debt . All Obligations now or hereafter under this Agreement and the Loan Documents constitute Senior Debt for purposes of the Indenture.

13. DEFINITIONS

13.1

Definitions . As used in the Loan Documents, the word "shall" is mandatory, the word "may" is permissive, the word "or" is not exclusive, the words "includes" and "including" are not limiting, the singular includes the plural, and numbers denoting amounts that are set off in brackets are negative. As used in this Agreement, the following capitalized terms have the following meanings:

" **Account** " is any "account" as defined in the Code with such additions to such term as may hereafter be made, and includes, without limitation, all accounts receivable and other sums owing to Borrower.

" **Account Debtor** " is any "account debtor" as defined in the Code with such additions to such term as may hereafter be made.

" **Affiliate** " is, with respect to any Person, each other Person that owns or controls directly or indirectly the Person, any Person that controls or is controlled by or is under common control with the Person, and each of that Person's senior executive officers, directors, partners and, for any Person that is a limited liability company, that Person's managers and members.

" **Agreement** " is defined in the preamble hereof.

" **Agreement Currency** " is defined in Section 12.3.

" **Algenist Assets** " means all assets, property and business, owned, held or used exclusively in the conduct of the manufacture and sale of skincare products under the Algenist brand by the Borrower, including but not limited to inventory, accounts receivable, equipment, furniture and fixtures.

" **Authorized Signer** " is any individual listed in Borrower's Borrowing Resolution who is authorized to execute the Loan Documents.

" **Banco Nacional Guaranty** " means any guarantee now or hereafter entered into by Borrower in favor of Banco Nacional de Desenvilvimento Economomico e Social in connection with a credit facility being made to Solazyme Bunge Produtos Renovaveis Ltda., provided however, that the maximum liability of Borrower under such guarantee cannot at any time exceed the Banco Nacional Guaranty Cap.

" **Banco Nacional Guaranty Cap** " means an amount equal to 35.71% of R$245,699,000 plus other amounts due under the Banco Nacional Guaranty as set forth in the definition of Guaranteed Obligations set forth therein.

" **Bank** " is defined in the preamble hereof.

" **Bank Entities** " is defined in Section 12.9.

" **Bank Expenses** " are all audit fees and expenses, costs, and expenses (including reasonable attorneys' fees and expenses) of Bank for preparing, amending, negotiating, administering,

defending and enforcing the Loan Documents (including, without limitation, those incurred in connection with appeals or Insolvency Proceedings) or otherwise incurred with respect to Borrower.

" **Bank Services** " are any products, credit services, and/or financial accommodations previously, now, or hereafter provided to Borrower or any of its Subsidiaries by Bank or any Bank Affiliate, including, without limitation, any letters of credit, cash management services (including, without limitation, merchant services, direct deposit of payroll, business credit cards, and check cashing services), interest rate swap arrangements, and foreign exchange services as any such products or services may be identified in Bank's various agreements related thereto (each, a " **Bank Services Agreement** ").

" **Borrower** " is defined in the preamble hereof.

" **Borrower's Books** " are all Borrower's books and records including ledgers, federal and state tax returns, records regarding Borrower's assets or liabilities, the Collateral, business operations or financial condition, and all computer programs or storage or any equipment containing such information.

" **Borrowing Resolutions** " are, with respect to any Person, those resolutions adopted by such Person's Board of Directors and delivered by such Person to Bank approving the Loan Documents to which such Person is a party and the transactions contemplated thereby, together with a certificate executed by its Secretary or authorized officer on behalf of such Person certifying that (a) such Person has the authority to execute, deliver, and perform its obligations under each of the Loan Documents to which it is a party, (b) that attached as Exhibit B to such certificate is a true, correct, and complete copy of the resolutions then in full force and effect authorizing and ratifying the execution, delivery, and performance by such Person of the Loan Documents to which it is a party, (c) the name(s) of the Person(s) authorized to execute the Loan Documents on behalf of such Person, together with a sample of the true signature(s) of such Person(s), and (d) that Bank may conclusively rely on such certificate unless and until such Person shall have delivered to Bank a further certificate canceling or amending such prior certificate.

" **Business Day** " is any day that is not a Saturday, Sunday or a day on which Bank is closed.

" **Cash Equivalents** " means (a) marketable securities issued, or directly, unconditionally and fully guaranteed or insured, by the United States or any agency or instrumentality thereof (provided that the full faith and credit of the United States is pledged in support thereof) having maturities of not more than one (1) year from the date of acquisition by such person, (b) time deposits and certificates of deposit of Bank or any commercial bank having, or which is the principal banking subsidiary of a bank holding company organized under the laws of the United States, any state thereof or the District of Columbia having, capital and surplus aggregating in excess of $250,000,000 and a rating of "A" (or such other similar equivalent rating) or higher by at least one nationally recognized statistical rating organization (as defined in Rule 436 under the Securities Act) with maturities of not more than one year from the date of acquisition by such person, (c) repurchase obligations with a term of not more than 30 days for underlying securities of the types described in clause (a) above entered into with any person meeting the qualifications specified in clause (b) above, (d) commercial paper having one of the two highest ratings obtainable from S&P or Moody's,

in each case maturing not more than one year after the date of acquisition by such person, (e) investments in money market funds at least 95% of whose assets are comprised of securities of the types described in clauses (a) through (d) above, and (f) demand deposit accounts maintained in the ordinary course of business with any bank meeting the qualifications specified in clause (b) above.

" **CFC** " means (a) each Person that is a "controlled foreign corporation" for purposes of the US Internal Revenue Code and (b) each subsidiary of any such controlled foreign corporation.

" **CFC Holding Company** " means a Subsidiary of Borrower substantially all of the assets of which consist of Equity Interests in CFCs.

" **Change in Control** " means (a) at any time, any "person" or "group" (as such terms are used in Sections 13(d) and 14(d) of the Securities Exchange Act of 1934, as amended (the " **Exchange Act** ")), shall become, or obtain rights (whether by means or warrants, options or otherwise) to become, the "beneficial owner" (as defined in Rules 13(d)-3 and 13(d)-5 under the Exchange Act), directly or indirectly, of 40% or more of the ordinary voting power for the election of directors of Borrower (determined on a fully diluted basis) other than by the sale of Borrower's equity securities in a public offering or to venture capital or private equity investors so long as Borrower identifies to Bank the venture capital or private equity investors at least seven (7) Business Days prior to the closing of the transaction and provides to Bank a description of the material terms of the transaction; or (b) during any period of 12 consecutive months, a majority of the members of the board of directors or other equivalent governing body of Borrower cease to be composed of individuals (i) who were members of that board or equivalent governing body on the first day of such period, (ii) whose election or nomination to that board or equivalent governing body was approved by individuals referred to in clause (i) above constituting at the time of such election or nomination at least a majority of that board or equivalent governing body or (iii) whose election or nomination to that board or other equivalent governing body was approved by individuals referred to in clauses (i) and (ii) above constituting at the time of such election or nomination at least a majority of that board or equivalent governing body.

" **Claims** " is defined in Section 12.3.

" **Code** " is the Uniform Commercial Code, as the same may, from time to time, be enacted and in effect in the State of California; provided, that, to the extent that the Code is used to define any term herein or in any Loan Document and such term is defined differently in different Articles or Divisions of the Code, the definition of such term contained in Article or Division 9 shall govern; provided further, that in the event that, by reason of mandatory provisions of law, any or all of the attachment, perfection, or priority of, or remedies with respect to, Bank's Lien on any Collateral is governed by the Uniform Commercial Code in effect in a jurisdiction other than the State of California, the term " **Code** " shall mean the Uniform Commercial Code as enacted and in effect in such other jurisdiction solely for purposes of the provisions thereof relating to such attachment, perfection, priority, or remedies and for purposes of definitions relating to such provisions.

“ **Collateral** ” is, prior to any Springing Lien Event, any and all properties, rights and assets of Borrower described on Exhibit A , and at all times after the occurrence of any Springing Lien Event which has not been waived by Bank, any and all of properties, rights and assets of Borrower described on Exhibits A and A-1 .

“ **Collateral Account** ” is any Deposit Account, Securities Account, or Commodity Account.

“ **Commodity Account** ” is any “commodity account” as defined in the Code with such additions to such term as may hereafter be made.

“ **Compliance Certificate** ” is that certain certificate in the form attached hereto as Exhibit B .

“ **Contingent Obligation** ” is, for any Person, any direct or indirect liability, contingent or not, of that Person for (a) any Indebtedness under clauses (a) through (c) of the definition thereof of another Person; (b) any obligations for undrawn letters of credit for the account of that Person; and (c) all obligations from any interest rate, currency or commodity swap agreement, interest rate cap or collar agreement, or other agreement or arrangement designated to protect a Person against fluctuation in interest rates, currency exchange rates or commodity prices (in each case, a “ **Hedging Obligation** ”); but “Contingent Obligation” does not include endorsements in the ordinary course of business. The amount of a Contingent Obligation is the stated or determined amount of the primary obligation for which the Contingent Obligation is made or, if not determinable, the maximum reasonably anticipated liability for it determined by the Person in good faith; but the amount may not exceed the maximum of the obligations under any guarantee or other support arrangement.

“ **Control Agreement** ” is any control agreement entered into among the depository institution at which Borrower maintains a Deposit Account or the securities intermediary or commodity intermediary at which Borrower maintains a Securities Account or a Commodity Account, Borrower, and Bank pursuant to which Bank obtains control (within the meaning of the Code) over such Deposit Account, Securities Account, or Commodity Account.

“ **Copyrights** ” are any and all copyright rights, copyright applications, copyright registrations and like protections in each work of authorship and derivative work thereof, whether published or unpublished and whether or not the same also constitutes a trade secret.

“ **Credit Extension** ” is any Letter of Credit, or any other extension of credit by Bank for Borrower’s benefit.

“ **Currency** ” is coined money and such other banknotes or other paper money as are authorized by law and circulate as a medium of exchange.

“ **Default Rate** ” is defined in Section 2.2(b).

“ **Deposit Account** ” is any “deposit account” as defined in the Code with such additions to such term as may hereafter be made.

“ **Designated Deposit Account** ” is Borrower’s deposit account, account number _____, maintained with Bank.

“ **Dollars** ,” “ **dollars** ” or use of the sign “ **$** ” means only lawful money of the United States and not any other currency, regardless of whether that currency uses the “$” sign to denote its currency or may be readily converted into lawful money of the United States.

“ **Dollar Equivalent** ” is, at any time, (a) with respect to any amount denominated in Dollars, such amount, and (b) with respect to any amount denominated in a Foreign Currency, the equivalent amount therefor in Dollars as determined by Bank at such time on the basis of the then-prevailing rate of exchange in San Francisco, California, for sales of the Foreign Currency for transfer to the country issuing such Foreign Currency.

“Domestic Subsidiary” means a Subsidiary organized under the laws of the United States or any state thereof or the District of Columbia.

“ **Effective Date** ” is defined in the preamble hereof.

“ **Equipment** ” is all “equipment” as defined in the Code with such additions to such term as may hereafter be made, and includes without limitation all machinery, fixtures, goods, vehicles (including motor vehicles and trailers), and any interest in any of the foregoing.

“ **Equity Interests** ” means shares of capital stock, partnership interests, membership interests, beneficial interests or other ownership interests, whether voting or nonvoting, in, or interests in the income or profits of, a Person, and any warrants, options or other rights entitling the holder thereof to purchase or acquire any of the foregoing.

“ **ERISA** ” is the Employee Retirement Income Security Act of 1974, and its regulations.

“ **Event of Default** ” is defined in Section 8.

“ **Exchange Act** ” is the Securities Exchange Act of 1934, as amended.

“ **Excluded Assets** ” means (i) any US Agency Grant Funds, any Collateral Accounts holding US Agency Grant Funds, any assets purchased (including by reimbursing Borrower for such purchases) in whole or in part with US Agency Grant Funds, any inventory produced with equipment purchased (including by reimbursing Borrower for such purchases) in whole or in part with US Agency Grant Funds and any revenues produced from any of the foregoing and any proceeds of the foregoing, and (ii) any assets subject to Liens permitted pursuant to clause (r) of the definition of “Permitted Liens”; provided, however, in no event will “Excluded Assets” include any domestic operating and other deposit accounts and securities accounts maintained with Bank and Bank’s Affiliates.

“ **FATCA** ” means Sections 1471 through 1474 of the Internal Revenue Code, as of the date of this Agreement (or any amended or successor version that is substantively comparable and not materially more onerous to comply with), any current or future regulations or official interpretations thereof, any agreements entered into pursuant to Section 1471(b)(1) of the Internal Revenue Code,

any intergovernmental agreement entered into in connection with the implementation of such Sections of the Internal Revenue Code and any fiscal or regulatory legislation, rules or practices adopted pursuant to such intergovernmental agreement.

" **Foreign Currency** " means lawful money of a country other than the United States.

"Foreign Subsidiary" means any Subsidiary which is not a Domestic Subsidiary.

" **GAAP** " is generally accepted accounting principles set forth in the opinions and pronouncements of the Accounting Principles Board of the American Institute of Certified Public Accountants and statements and pronouncements of the Financial Accounting Standards Board or in such other statements by such other Person as may be approved by a significant segment of the accounting profession, which are applicable to the circumstances as of the date of determination.

" **General Intangibles** " is all "general intangibles" as defined in the Code in effect on the date hereof with such additions to such term as may hereafter be made, and includes without limitation, all Intellectual Property, claims, income and other tax refunds, security and other deposits, payment intangibles, contract rights, options to purchase or sell real or personal property, rights in all litigation presently or hereafter pending (whether in contract, tort or otherwise), insurance policies (including without limitation key man, property damage, and business interruption insurance), payments of insurance and rights to payment of any kind.

" **Governmental Approval** " is any consent, authorization, approval, order, license, franchise, permit, certificate, accreditation, registration, filing or notice, of, issued by, from or to, or other act by or in respect of, any Governmental Authority.

" **Governmental Authority** " is any nation or government, any state or other political subdivision thereof, any agency, authority, instrumentality, regulatory body, court, central bank or other entity exercising executive, legislative, judicial, taxing, regulatory or administrative functions of or pertaining to government, any securities exchange and any self-regulatory organization.

" **Hedging Obligation** " is defined in the definition of "Contingent Obligation."

" **Indebtedness** " is (a) indebtedness for borrowed money or the deferred price of property or services, such as reimbursement and other obligations for surety bonds and letters of credit, (b) obligations evidenced by notes, bonds, debentures or similar instruments, (c) capital lease obligations, and (d) Contingent Obligations.

" **Indemnified Person** " is defined in Section 12.3.

" **Indenture"** means (a) that certain Indenture dated as of January 24, 2013 by and between Borrower and Wells Fargo Bank, National Association, as trustee, in connection with Borrower's 6% convertible Senior Subordinated Notes due 2018 and (b) that certain Indenture dated as of April 1, 2014 between Borrower and Wells Fargo Bank, National Association, as trustee in connection with Borrower's 5% convertible Senior Subordinated Noted due 2019.

“ **Insolvency Proceeding** ” is any proceeding by or against any Person under the United States Bankruptcy Code, or any other bankruptcy or insolvency law, including assignments for the benefit of creditors, compositions, extensions generally with its creditors, or proceedings seeking reorganization, arrangement, or other relief.

“ **Intellectual Property** ” means, with respect to any Person, means all of such Person’s right, title, and interest in and to the following:

(a) its Copyrights, Trademarks and Patents;

(b) any and all trade secrets and trade secret rights, including, without limitation, any rights to unpatented inventions, know-how, operating manuals;

(c) any and all source code;

(d) any and all design rights which may be available to such Person;

(e) any and all claims for damages by way of past, present and future infringement of any of the foregoing, with the right, but not the obligation, to sue for and collect such damages for said use or infringement of the Intellectual Property rights identified above; and

(f) all amendments, renewals and extensions of any of the Copyrights, Trademarks or Patents owned by such Person.

“ **Inventory** ” is all “inventory” as defined in the Code in effect on the date hereof with such additions to such term as may hereafter be made, and includes without limitation all merchandise, raw materials, parts, supplies, packing and shipping materials, work in process and finished products, including without limitation such inventory as is temporarily out of Borrower’s custody or possession or in transit and including any returned goods and any documents of title representing any of the above.

“ **Investment** ” is any beneficial ownership interest in any Person (including stock, partnership interest or other securities), and any loan, advance or capital contribution to any Person.

“ **Judgment Currency** ” is defined in Section 12.3.

“ **Letter of Credit** ” means a standby letter of credit issued by Bank based upon an application, guarantee, indemnity or similar agreement on the part of Bank as set forth in Section 2.1.1, including without limitation the Outstanding Letter of Credit.

“ **Letter of Credit Application** ” is defined in Section 2.1.1.

“ **Letter of Credit Expiration Date** ” is July 19, 2019.

“ **Letter of Credit Reserve** ” has the meaning set forth in Section 2.1.1(c).

“ **Lien** ” is a claim, mortgage, deed of trust, levy, charge, pledge, security interest or other encumbrance of any kind, whether voluntarily incurred or arising by operation of law or otherwise against any property.

“ **Loan Documents** ” are, collectively, this Agreement, and any other documents related to this Agreement, any Bank Services Agreement, any note, or notes or guaranties executed by Borrower, and any other present or future agreement by Borrower with or for the benefit of Bank in connection with this Agreement or Bank Services, all as amended, restated, or otherwise modified.

“ **Material Adverse Change** ” is (a) a material impairment in the perfection or priority of Bank’s Lien in the Collateral; (b) a material adverse change in the business, operations, or condition (financial or otherwise) of Borrower and its consolidated Subsidiaries, taken as a whole; or (c) a material impairment of the prospect of repayment of any portion of the Obligations.

“ **Obligations** ” are Borrower’s obligations to pay when due any debts, principal, interest, fees, Bank Expenses, and other amounts Borrower owes Bank now or later, whether under this Agreement, the other Loan Documents, or otherwise, including, without limitation, all obligations relating to letters of credit (including reimbursement obligations for drawn and undrawn letters of credit), cash management services, and foreign exchange contracts, if any, and including interest accruing after Insolvency Proceedings begin and debts, liabilities, or obligations of Borrower assigned to Bank, and to perform Borrower’s duties under the Loan Documents.

“ **Operating Documents** ” are, for any Person, such Person’s formation documents, as certified by the Secretary of State (or equivalent agency) of such Person’s jurisdiction of organization or formation, as applicable, on a date that is no earlier than thirty (30) days prior to the Effective Date, and, (a) if such Person is a corporation, its bylaws in current form, (b) if such Person is a limited liability company, its limited liability company agreement (or similar agreement), and (c) if such Person is a partnership, its partnership agreement (or similar agreement), each of the foregoing with all current amendments or modifications thereto.

“ **Outstanding Letter of Credit** ” means that certain irrevocable standby Letter of Credit number SVBSF010920 issued by Bank in the amount of 35,356,000 Brazilian Reals in favor of Itau Unibanco S.A.

“ **Patents** ” means all patents and patent applications including without limitation, divisions, continuations, renewals, reissues, extensions and continuations-in-part of the same.

“ **Peoria Assets** ” means the building located as 910 NE Adams St., Peoria, IL 61603 and all of the Borrower’s equipment, inventory and other assets located therein.

“ **Perfection Certificate** ” is defined in Section 5.1.

" **Permitted Distributions** " are:

(a) purchases of capital stock from former employees, consultants and directors in an aggregate amount not to exceed Two Hundred Fifty Thousand Dollars ($250,000) in any fiscal year provided that at the time of such purchase no Event of Default has occurred and is continuing;

(b) distributions or dividends consisting solely of Borrower's capital stock;

(c) purchases for value of any rights distributed in connection with any stockholder rights plan;

(d) purchases of capital stock or options to acquire such capital stock with the proceeds received from a substantially concurrent issuance of capital stock or convertible securities;

(e) purchases of capital stock pledged as collateral for loans to employees;

(f) purchases of capital stock in connection with the exercise of stock options or stock appreciation rights by way of cashless exercise or in connection with the satisfaction of withholding tax obligations;

(g) purchases or cash in lieu of fractional shares of capital stock arising out of stock dividends, splits or combinations or business combinations or in connection with the issuance of warrants, options or other securities convertible or exchangeable into or exchangeable for capital stock in Borrower; and

(h) conversions of any convertible securities into other securities or settlement in cash pursuant to the terms of such convertible securities or otherwise in exchange therefor.

" **Permitted Indebtedness"** is:

(a) Borrower's Indebtedness to Bank under this Agreement and the other Loan Documents;

(b) Indebtedness existing on the Effective Date and shown on the Perfection Certificate;

(c) Subordinated Debt;

(d) unsecured Indebtedness to trade creditors incurred in the ordinary course of business;

(e) Indebtedness incurred as a result of endorsing negotiable instruments received in the ordinary course of business;

(f) Indebtedness secured by Liens permitted under clauses (a) and (c) of the definition of "Permitted Liens" hereunder;

(g) Capital lease obligations, provided that any Liens in connection with such capital leases are confined to the property which is the subject of such capital lease;

(h) Indebtedness of Borrower to any Subsidiary in an aggregate amount not to exceed One Million Dollars ($1,000,000);

(i) Contingent Obligations under (y) the Banco Nacional Guaranty or (z) any guarantee now or hereafter entered into by Borrower in connection with one or more credit facilities being made to Solazyme Bunge Produtos Renovaveis Ltda. in connection with the financing of construction at, or an expansion of, SB Oils' existing facility; provided that the maximum liability of Borrower under this clause (z) shall not exceed at any time $10,000,000;

(j) Contingent Obligations (other than those set forth in subsection (i) above, in respect of Permitted Indebtedness of Subsidiaries, in an aggregate amount not to exceed One Million Dollars ($1,000,000);

(k) Indebtedness of any Person that becomes a Subsidiary (or of any Person not previously a Subsidiary that is merged or consolidated with or into a Subsidiary in a transaction permitted hereunder) after the date hereof, or Indebtedness of any Person that is assumed by Borrower or any Subsidiary in connection with an acquisition of assets by Borrower or such Subsidiary in an acquisition permitted hereunder or another Permitted Investment; *provided* that (i) such Indebtedness exists at the time such Person becomes a Subsidiary (or is so merged or consolidated) or such assets are acquired and is not created in contemplation of or in connection with such Person becoming a Subsidiary (or such merger or consolidation) or such assets being acquired, (ii) neither Borrower nor any Subsidiary (other than such Person or the Person with which such Person is merged or consolidated or that so assumes such Person's Indebtedness) shall guarantee or otherwise become liable for the payment of such Indebtedness, (iii) so long as no Event of Default has occurred at the time of such transaction or will occur as a result of such transaction and in the case of such transaction involving Borrower, Borrower is the surviving legal entity; and (iv) the aggregate amount of all such Indebtedness assumed by Borrower does not at any time exceed Five Million Dollars ($5,000,000);

(l) Indebtedness owed in respect of any overdrafts and related liabilities arising from treasury, depository, credit card and cash management services or in connection with any automated clearing house transfers of funds; *provided* that such Indebtedness shall be repaid in full before the same shall become delinquent and the aggregate amount of such Indebtedness shall not exceed One Million Dollars ($1,000,000);

(m) Indebtedness in an aggregate amount not to exceed Two Million Dollars ($2,000,000) in respect of letters of credit, bank guarantees and similar instruments issued by a Person other than Bank for the account of Borrower or any Subsidiary in the ordinary course of business, supporting obligations under (i) workers' compensation, unemployment insurance and other social security laws and (ii) bids, trade contracts, leases, statutory obligations, surety and appeal bonds, performance bonds and obligations of a like nature incurred in the ordinary course of business;

(n) non-speculative Hedging Obligations in the ordinary course of business;

(o) Investments permitted under clause (a) or (k) of the definition of Permitted Investments constituting Indebtedness;

(p) other Indebtedness in an aggregate principal amount not to exceed Two Million Five Hundred Thousand Dollars ($2,500,000) at any time outstanding;

(q) Indebtedness of Borrower or any Subsidiary in the form of purchase price adjustments, non-competition agreements or other similar arrangements incurred in connection with any Permitted Investment; and

(r) Indebtedness secured solely by the Peoria Assets;

(s) Indebtedness in respect of letters of credit in an aggregate face amount to exceed Two Million Five Hundred Thousand Dollars ($2,500,000);

(t) the Banco Nacional Guaranty; and;

(u) Indebtedness of Subsidiaries in respect of lines of credit provided to Foreign Subsidiaries; and

(v) extensions, refinancings, modifications, amendments and restatements of any items of Permitted Indebtedness (a) through (u) above, provided that the principal amount thereof is not increased or the terms thereof are not modified to impose more burdensome terms upon Borrower or its Subsidiary, as the case may be.

" **Permitted Investments** " are:

(a) Investments (including, without limitation, Subsidiaries) existing on the Effective Date and shown on the Perfection Certificate;

(b) Investments consisting of Cash Equivalents, and (ii) any Investments approved by Borrower's Board of Directors or otherwise permitted by Borrower's investment policy, as amended from time to time;

(c) Investments consisting of the endorsement of negotiable instruments for deposit or collection or similar transactions in the ordinary course of Borrower;

(d) Investments consisting of Collateral Accounts so long as Bank has a perfected security interest in such Collateral Account if and to the extent required under Section 6.5;

(e) Investments accepted in connection with Transfers permitted by Section 7.1;

(f) Investments (i) by Borrower in Subsidiaries so long as such Investments are made in good faith by Borrower for bona fide business purposes, including the establishment and operation of such Subsidiary; and (ii) by Subsidiaries in other Subsidiaries or in the Borrower;

(g) Investments consisting of (i) travel advances and employee relocation loans and other employee loans and advances in the ordinary course of business, and (ii) loans to employees, officers or directors relating to the purchase of equity securities of Borrower or its Subsidiaries pursuant to employee stock purchase plans or agreements approved by Borrower's Board of Directors;

(h) Investments (including debt obligations) received in connection with the bankruptcy or reorganization of customers or suppliers and in settlement of delinquent obligations of, and other disputes with, customers or suppliers arising in the ordinary course of business, including the Transfers of accounts receivable in the ordinary course of business in connection with the collection or compromise thereof;

(i) Investments consisting of notes receivable of, or prepaid royalties and other credit extensions, to customers and suppliers who are not Affiliates, in the ordinary course of business; provided that this paragraph (j) shall not apply to Investments of Borrower in any Subsidiary;

(j) Investments consisting of extensions of credit to Borrower's or its Subsidiaries' customers in the nature of accounts receivable, prepaid royalties or notes receivable in the ordinary course of business arising from the sale or lease of goods, provision of services or licensing activities;

(k) non-speculative Hedging Obligations in the ordinary course of business;

(l) licensing and other contributions of Intellectual Property to joint ventures, and research and/or development agreements;

(m) additional Investments in joint ventures;

(n) Liens in favor of Bank arising in connection with Borrower's Deposit and/or Securities Accounts maintained with Bank or its Affiliates;

(o) other Investments not exceeding Five Million Dollars ($5,000,000) in the aggregate outstanding at any time; and

(p) Investments permitted by Section 7.3.

" **Permitted Liens** " are:

(a) Liens existing on the Effective Date and shown on the Perfection Certificate or arising under this Agreement and the other Loan Documents;

(b) Liens for taxes, fees, assessments or other government charges or levies, either (i) not due and payable or (ii) being contested in good faith and for which Borrower maintains adequate reserves on its Books, provided that no notice of any such Lien has been filed or recorded under the Internal Revenue Code of 1986, as amended, and the Treasury Regulations adopted thereunder in an aggregate amount in excess of One Million Dollars ($1,000,000) and no

collection proceedings with respect to such Liens have begun against any property of Borrower (other than the filing of a notice of any such Lien or Liens);

(c) (i) Liens on assets acquired or held by Borrower or any Subsidiary incurred for financing the acquisition of such assets, if the Lien is confined to the property acquired and improvements and the proceeds of such assets, or (ii) Liens existing on assets when acquired, if the Lien is confined to the property acquired and improvements and the proceeds of such assets;

(d) Liens of carriers, warehousemen, suppliers, or other Persons that are possessory in nature arising in the ordinary course of business so long as such Liens attach only to Inventory and which are not delinquent or remain payable without penalty or which are being contested in good faith and by appropriate proceedings which proceedings have the effect of preventing the forfeiture or sale of the property subject thereto;

(e) Liens to secure payment of workers' compensation, employment insurance, old-age pensions, social security and other like obligations incurred in the ordinary course of business (other than Liens imposed by ERISA);

(f) any Lien existing on any asset of any Person that becomes a Subsidiary (or of any Person not previously a Subsidiary that is merged or consolidated with or into Borrower or a Subsidiary in a transaction permitted hereunder) after the date hereof prior to the time such Person becomes a Subsidiary (or is so merged or consolidated); *provided* that (i) such Lien is not created in contemplation of or in connection with such acquisition or such Person becoming a Subsidiary (or such merger or consolidation), (ii) such Lien shall not apply to any other asset of Borrower or any Subsidiary, and (iii) such Lien shall secure only those obligations that it secures on the date of such acquisition or the date such Person becomes a Subsidiary (or is so merged or consolidated);

(g) [reserved];

(h) Liens to secure Indebtedness permitted pursuant to clause (c) of the defined term "Permitted Indebtedness"; provided, that such Lien shall only apply to the assets and capital stock of any Person being acquired and not apply to any other asset of Borrower or any Subsidiary and (ii) Liens on assets of a Foreign Subsidiary to secure Indebtedness of such Foreign Subsidiary permitted under clause (t) of the definition of Permitted Indebtedness;

(i) leases or subleases of real property granted in the ordinary course of Borrower's business (or, if referring to another Person, in the ordinary course of such Person's business), and leases, subleases, non-exclusive licenses or sublicenses of personal property (other than Intellectual Property) granted in the ordinary course of Borrower's business (or, if referring to another Person, in the ordinary course of such Person's business), if the leases, subleases, licenses and sublicenses do not prohibit granting Bank a security interest therein;

(j) non-exclusive license of Intellectual Property granted to third parties in the ordinary course of business, and licenses of Intellectual Property that could not result in a legal transfer of

title of the licensed property that may be exclusive in respects other than territory and that may be exclusive as to territory only as to discreet geographical areas outside of the United States;

(k) Liens arising from attachments or judgments, orders, or decrees in circumstances not constituting an Event of Default under Sections 8.4 and 8.7;

(l) leases or subleases of real property granted in the ordinary course of Borrower's business (or, if referring to another Person, in the ordinary course of such Person's business), and leases, subleases, non-exclusive licenses or sublicenses of personal property (other than Intellectual Property) granted in the ordinary course of Borrower's business (or, if referring to another Person, in the ordinary course of such Person's business), if the leases, subleases, licenses and sublicenses do not prohibit granting Bank a security interest therein;

(m) (1) licenses of Intellectual Property of Borrower or its Subsidiaries, and (2) other contributions of Intellectual Property to joint ventures, research and/or development programs, material transfer agreements or evaluation agreements;

(n) Liens arising from attachments or judgments, orders, or decrees in circumstances not constituting an Event of Default under Sections 8.4 and 8.7;

(o) Liens in favor of custom and revenue authorities arising as a matter of law to secure the payment of custom duties in connection with the importation of goods;

(p) Liens in favor of Bank arising in connection with Borrower's Deposit and/or Securities Accounts maintained with Bank or its Affiliates;

(q) Liens on the Peoria Assets;

(r) deposits to secure the performance of bids, trade contracts (other than for borrowed money), contracts for the purchase of property, leases, statutory obligations, surety and appeal bonds, performance bonds and other obligations of a like nature, in each case, incurred in the ordinary course of business and not representing an obligation for borrowed money;

(s) easements, zoning restrictions, rights of way, licenses, reservations, covenants, utility easements, building restrictions and similar encumbrances on real property imposed by law or arising in the ordinary course of business that do not secure any monetary obligations and do not materially detract from the value of the affected property or interfere with the ordinary conduct of business of Borrower or any Subsidiary;

(t) any interest or title of a lessor under any capital lease; provided that interest or title does not extend to any property other than the property leased by such lessor to Borrower or any of its Subsidiary under such capital lease;

(u) pledges and deposits in the ordinary course of business securing insurance premiums or reimbursement obligations under insurance policies, in each case payable to insurance carriers that provide insurance to Borrower and any Subsidiary;

(v) Liens on deposit accounts, certificates of deposits or other cash or securities pledged in an aggregate face amount not exceeding One Million Dollars ($1,000,000) to secure reimbursement obligations with respect to letters of credit which encumber documents and other property relating to letters of credit and products and proceeds thereof;

(w) Liens attaching solely to cash earnest money deposits in connection with Investments permitted by Section 7.3;

(x) Liens arising out of conditional sale, title retention, consignment or similar arrangements for sale of goods entered into by Borrower or any Subsidiary in the ordinary course of business covering such goods and not prohibited by this Agreement;

(y) Liens securing obligations in an aggregate outstanding principal amount not exceeding Two Million Five Hundred Thousand Dollars ($2,500,000) at any time; and

(z) Liens incurred in the extension, renewal or refinancing of the indebtedness secured by Liens described in (a) through (y), but any extension, renewal or replacement Lien must be limited to the property encumbered by the existing Lien and the principal amount of the indebtedness may not increase.

" **Permitted Pledged Accounts** " are Collateral Accounts subject to Liens permitted pursuant to clauses (f), (r), (u) (v), (w), (y) of the definition of "Permitted Liens" (so long as the aggregate amount held in such Collateral Accounts pledged pursuant to clause (y) of the definition of "Permitted Liens" does not exceed the aggregate amount of obligations so secured), and (z) (to the extent related to Liens permitted pursuant to clauses (f), (r), (u), (v), (w), and (y)) of the definition of "Permitted Liens"; provided, however, in no event will "Permitted Pledged Accounts" include any Collateral Accounts maintained with Bank and Bank's Affiliates.

" **Person** " is any individual, sole proprietorship, partnership, limited liability company, joint venture, company, trust, unincorporated organization, association, corporation, institution, public benefit corporation, firm, joint stock company, estate, entity or government agency.

" **Prime Rate** " is the rate of interest per annum from time to time published in the money rates section of *The Wall Street Journal* or any successor publication thereto as the "prime rate" then in effect; provided that if such rate of interest, as set forth from time to time in the money rates section of *The Wall Street Journal* , becomes unavailable for any reason as determined by Bank, the "Prime Rate" shall mean the rate of interest per annum announced by Bank as its prime rate in effect at its principal office in the State of California (such Bank announced Prime Rate not being intended to be the lowest rate of interest charged by Bank in connection with extensions of credit to debtors).

" **Quarterly Financial Statements** " is defined in Section 6.2(a).

" **Registered Organization** " is any "registered organization" as defined in the Code with such additions to such term as may hereafter be made.

“ **Regulatory Change** ” means, with respect to Bank, any change on or after the date of this Agreement in United States federal, state, or foreign laws or regulations, including Regulation D, or the adoption or making on or after such date of any interpretations, directives, or requests applying to a class of lenders including Bank, of or under any United States federal or state, or any foreign laws or regulations (whether or not having the force of law) by any court or governmental or monetary authority charged with the interpretation or administration thereof.

“ **Requirement of Law** ” is as to any Person, the organizational or governing documents of such Person, and any law (statutory or common), treaty, rule or regulation or determination of an arbitrator or a court or other Governmental Authority, in each case applicable to or binding upon such Person or any of its property or to which such Person or any of its property is subject.

“ **Responsible Officer** ” is any of the Chief Executive Officer, President, Chief Financial Officer and Controller of Borrower.

“ **Restricted License** ” is any material license or other agreement with respect to which Borrower is the licensee (a) that prohibits or otherwise restricts Borrower from granting a security interest in Borrower’s interest in such license or agreement or any other property, or (b) for which a default under or termination of could interfere with the Bank’s right to sell any Collateral.

“ **SEC** ” shall mean the Securities and Exchange Commission, any successor thereto, and any analogous Governmental Authority.

“ **Securities Account** ” is any “securities account” as defined in the Code with such additions to such term as may hereafter be made.

“ **Settlement Date** ” is defined in Section 2.1.1.

“ **Springing Collateral** ” is any and all properties, rights and assets of Borrower described on Exhibit A-1.

“ **Springing Lien Event** ” means the occurrence of any of the following: (a) a breach of any of the provisions of Section 6.6 of this Agreement, (b) if at any time the Obligations fail to constitute “senior indebtedness” under any existing or future debt agreements of Borrower, including, without limitation, the Indenture; (c) any default in the repayment of any Indebtedness of Borrower, including without limitation, the Obligations, (d) any draft is presented for payment under any Letter of Credit, (e) if prior to the expiration and termination of this Agreement and the Letters of Credit, Borrower’s 2018 and 2019 subordinated notes, replacement notes or any other Indebtedness of Borrower in a principal amount greater than $4,000,000 will mature within 150 days or less, or (f) an Event of Default occurs under Section 8.5 or 8.7 of this Agreement.

“ **Subordinated Debt** ” means (i) the Indebtedness existing as of the Effective Date, as such indebtedness may be amended pursuant to Section 7.9 of this Agreement, including any refinancing or replacement of such Indebtedness, provided that the principal amount of such Indebtedness is not increased in excess of the principal amount of such Indebtedness as in existence on the Effective Date as a result of any such refinancing or replacement and further provided that the subordination

terms thereof are no less favorable to the Bank than those applicable to such Subordinated Debt in existence as of the Effective Date, and (ii) other indebtedness incurred by Borrower subordinated to all of Borrower's now or hereafter indebtedness to Bank (pursuant to a subordination, intercreditor, or other similar agreement in form and substance satisfactory to Bank entered into between Bank and the other creditor), on terms acceptable to Bank in its reasonable discretion.

" **Subsidiary** " is, as to any Person, a corporation, partnership, limited liability company or other entity of which shares of stock or other ownership interests having ordinary voting power (other than stock or such other ownership interests having such power only by reason of the happening of a contingency) to elect a majority of the board of directors or other managers of such corporation, partnership or other entity are at the time owned, or the management of which is otherwise controlled, directly or indirectly through one or more intermediaries, or both, by such Person. Unless the context otherwise requires, each reference to a Subsidiary herein shall be a reference to a Subsidiary of Borrower.

" **Trademarks** " means any trademark and servicemark rights, whether registered or not, applications to register and registrations of the same and like protections, and the entire goodwill of the business of Borrower connected with and symbolized by such trademarks.

" **Transfer** " is defined in Section 7.1.

" **US Agency** " means any department or agency of the United States of America or any State thereof.

" **US Agency Grant Funds** " means any funds disbursed by a US Agency to Borrower.

[Signature page follows. **]**

IN WITNESS WHEREOF , the parties hereto have caused this Agreement to be executed as of the Effective Date.

BORROWER:

TERRAVIA HOLDINGS, INC.

By___ /s/ Tyler Painter_____
Name: __ Tyler Painter_____
Title: ___ Chief Operating Officer and Chief Financial Officer____

BANK:

SILICON VALLEY BANK

By___ /s/ Mona Maitra_____
Name: __ Mona Maitra_____
Title: ___ Vice President_____

TO: SILICON VALLEY BANK APPLICATION	DATE April 12, 2016	FOR BANK USE ONLY	LETTER OF CREDIT NO.

APPLICANT HEREBY REQUESTS THAT SILICON VALLEY BANK ("SVB") ISSUE ITS IRREVOCABLE STANDBY LETTER OF CREDIT (THE "CREDIT") ON SUBSTANTIALLY TILE TERMS BELOW AND, UNLESS OTHERWISE SPECIFIED BELOW IN SPECIAL INSTRUCTIONS, FORWARD THE CREDIT BY THE FOLLOWING MEANS TO THE BENEFICIARY DIRECTLY OR THROUGH A BANK SELECTED BY SILICON VALLEY BANK:

☒ S.W.I.F.T. ☐ COURIER ☐ OTHER _____

Applicant: *(Name and Street Address/ P.O. Box not accepted)* Solazyme, Inc. 225 Gateway Blvd. South San Francisco, CA 94080	**Account Party:** *(Name and address of entity to be named in Credit if different from Applicant.)* ☐ **The Applicant is requesting the Credit for account of ("Account Party").** ☐ The Applicant and the Account Party are jointly and severally liable hereunder (Account Party signature required below).	
Beneficiary: *(Name and Street Address/P.O. Box not accepted)* Itau Unibanco Sao Paolo, Brazil	**Advising Bank:** *(If Applicable/Used mostly for international beneficiaries. If left blank, SVB may select)*	
Amount: *(In words)* Thirty Five Million Three Hundred Fifty Six Thousand Brazilian Reals	*(In figures)* BRL 35,356,000.00	**(Currency)** *in US Dollars unless otherwise specified*

Foreign Exchange Contract No.:

Availability: Unless otherwise specified, herein, the credit is to expire in the country where the beneficiary is located or at the issuer's option, at issuers issuing office or at confirming banks counters.

Expiration Date: 06-17-2019 *(MM/DD/YY format)If expiry date exceeds more than one year, SVB may include an annual automatic extension condition.*

☐ Auto extension with _____ days prior notice of non-extension and a final expiration date of _____ *(MM/DD/YY)*

Available By : *(Check and complete only one of the following. Applicant will need to sign and approve the draft of the Letter of Credit provided by SVB prior to issuance.)*

☒ **Issue the Credit substantially in the form and with the wording attached to this Application. The attached specimen is approved by Applicant.** *(Label the attached specimen as an attachment to this specific Application)*

☐ **A statement worded as follows indicating it is signed by the Beneficiary (if a person) or its authorized officer:** *(Please quote below the exact wording of the drawing statement) (Attach additional signed sheet(s), if necessary, and label as attachments to this specific Application.)*

Additional Requirements and/or Special Instructions *(if any)* :

Purpose of this Standby Letter of Credit and/or description of the underlying transaction: *(Example: To support tenant obligations under a lease agreement)*

LC is issued to cover issuance of a bank guarantee by Itau Unibanco. The purpose of the bank guarantee is to secure loan obligations of Solazyme made by BNDES.

U.S. Patriot Act Notice: U.S. Federal laws require all financial institutions to obtain, verify, and record information that identifies each person who opens an account. Issuing the Credit is considered to be opening an account and will require compliance with these Federal laws.

Agreement and Signature(s): The opening of the Credit is subject to the terms of the following Agreement which are incorporated herein by this reference. By executing this Application, Applicant (and the above named Account Party, if different) hereby acknowledges and agrees to the same and to the Schedule of Fees referred to in the following Agreement as such Schedule may be amended by Bank from time to time.

Print or Type Name of Applicant: Solazyme, Inc.	**Print or Type Name of Account Party:**
Authorized Signature (and Title, if applicable) (Must be a signer on the latest borrowing certificate.): /s/ Jonathan Wolfson Jonathan Wolfson, Chief Executive Officer	**Account Party Signature (and Title, if applicable)**
Authorized Signature (and Title, if applicable) (Must be a signer on the latest borrowing certificate.): /s/ Tyler Painter Tyler Painter, Chief Financial Officer	**Account Party Signature (and Title, if applicable)**

Standby Letter of Credit Agreement

B.

AGREEMENT

In consideration of SVB issuing the Credit, each of Applicant and, if Applicant and Account Party are designated as jointly and severally obligated hereunder, Account Party (in which case Applicant and Account Party are collectively referenced herein, jointly and severally, as "Applicant"), agrees as follows:

1. Applicant agrees to pay to SVB, on demand, the amount of each draw on the Credit together with interest thereon, calculated for the actual number of days from the date of payment of such draw to but not including the date of reimbursement on the basis of a 360 day year, at a per annum rate equal to SVB's Prime

Rate plus 5%. The term 'Prime Rate" means the fluctuating per annum rate announced from time to time by SVB as its "Prime Rate," said rate to be adjusted upon any change in the Prime Rate. Applicant irrevocably authorizes SVB to charge any accounts maintained by Applicant with SVB and to make advances against any lines of credit extended by SVB for all such payments. Applicant acknowledges that SVB is not obligated to charge such accounts or to make any such advances and the failure for whatever reason of SVB to do so will not relieve Applicant of its obligation to make such payments. In addition, Applicant agrees to pay SVB, on demand, all commissions, charges, fees, taxes, costs and expenses (including reasonable attorneys' fees) assessed against or incurred by SVB or any of its correspondents in connection with the Credit, this Application and Agreement, the administration of the Credit (including amendments, modifications and extensions thereof), and the enforcement by SVB of its rights hereunder, including such fees and expenses as may be set forth from time to time in SVB's then current "Schedule of Fees," all such amounts to be non-refundable upon payment.

2. All amounts payable hereunder are payable in U.S. Dollars and in immediately available funds. If the Credit is issued in a foreign currency, unless SVB agrees otherwise in its sole discretion, Applicant will pay the U.S. Dollar equivalent of the foreign currency amounts paid by SVB under the Credit at the then-prevailing rate of exchange in San Francisco, California, for sales of the foreign currency for transfer to the country issuing such foreign currency, as determined by SVB.

3. Applicant will indemnify and hold SVB and its affiliates, officers, directors, employees, agents and correspondents (each an "Affiliated Party") harmless from and against any and all claims, losses, liabilities, costs (including reasonable attorneys fees) and damages (collectively, "Losses") arising out of or relating to the Credit, this Application and Agreement and all actions or inactions of SVB and its Affiliated Parties with respect thereto other than such as result directly from the gross negligence or willful misconduct of SVB or an Affiliated Party. If the beneficiary of the Credit or any transferee thereof ("Beneficiary") is a financial institution which, in reliance upon the Credit, has issued or is to issue its own guarantee or similar undertaking to a third party at Applicant's request (whether such request is communicated directly by Applicant or through SVB to such Beneficiary), Applicant will (i) reimburse SVB for all amounts paid by SVB to such Beneficiary (whether or not the Credit has expired) and (ii) indemnify SVB and its Affiliated Parties for any Losses (including fees paid to Beneficiary) arising out of or in connection with the Credit and such guarantee or other undertaking. Applicant will remain liable under this Application and Agreement and the Credit until Beneficiary expressly releases SVB from its obligations under the Credit.

4. If any law or regulation or the interpretation thereof by any court or administrative or governmental authority shall: (i) impose any reserve or similar requirement against letters of credit issued or assets held by, or deposits in or for the account of, SVB or (ii) impose on SVB any insurance premium or other condition regarding the Credit, and the result shall be to increase the costs of issuing or maintaining the Credit over that which SVB assumed in determining its pricing relating to the Credit, then Applicant shall pay to SVB from time to time upon demand such additional amounts as are sufficient to compensate SVB for such increased cost.

5. SVB may place a hold on any account pledged as collateral and may hold the collateral for up to 30 days following the expiration of the Credit and the payment by Applicant of its obligations hereunder.

6. The obligation of Applicant hereunder to reimburse SVB for drawings under the Credit is absolute, irrevocable and unconditional under any and all circumstances and irrespective of any dispute, claim, set-off, counterclaim or defense which Applicant may have against SVB or any Affiliated Party, whether in connection with the Credit, this Application and Agreement or otherwise, including any of the same based upon or arising out of: (i) any lack of validity or enforceability of the Credit or any document issued or provided in connection with the Credit or this Application and Agreement; (ii) any allegation by Applicant or any other person that any demand, statement or any other document presented under the Credit is forged, fraudulent, invalid or insufficient in any respect, or that any statement therein is inaccurate or incomplete in any respect or that variations in punctuation, capitalization, spelling or format were contained in the drafts or any statements presented in connection with any drawing; (iii) any amendment or waiver of or consent to departure from the terms of the Credit; (iv) the existence of any dispute, claim, set-off, counterclaim or defense or other right which Applicant or any other person have at any time against Beneficiary (or any person for whom Beneficiary may he acting); (v) the presentation of a draft or other instrument by an assignee, transferee or successor-in-interest of the original Beneficiary; (vi) any exchange, release or non-perfection of any lien securing the obligations of Applicant hereunder or the release of any guarantor of such obligations; (vii) any delay, default or fraud in connection with the underlying transaction giving rise to the issuance of the Credit; (viii) any delay in giving or failure to give notice of any kind; (ix) any errors, omissions, neglect, default or delay in transmission of any messages by SVB, any Affiliated Party or any advising bank in connection with a Credit; (x) the invalidity or insufficiency of any endorsements relating to the Credit; (xi) honor of any presentation that substantially or reasonably complies with the terms and conditions of the Credit even if the Credit requires strict or literal compliance by Beneficiary, (xii) honor of a nonnegotiable or informal or unmarked demand or a demand by Beneficiary presented electronically even if the Credit requires that Beneficiary's demand be in the form of a draft and state that it is drawn under the Credit; (xiii) honor of a presentation without regard to any non-documentary conditions in the Credit; (xiv) honor of a presentation up to the amount available under the Credit against a draft or other documents claiming an amount in excess of the amount available; or (xv) honor of any presentation after the expiration date of the Credit (A) if presentation prior to such expiration date was prevented by an interruption of business or other cause beyond the control of SVB or strikes or lockouts, or (B) notwithstanding that a presentation was made prior to such expiration date and dishonored if subsequently SVB or any court or other finder of fact determines such presentation should have been honored. Nothing contained herein shall constitute a waiver by Applicant of rights Applicant may have against SVB resulting from gross negligence or willful misconduct; provided, however, that Applicant expressly agrees that its right to exercise any such rights is conditioned upon Applicant having made all payments required to be made by Applicant hereunder and, provided further, that in no event shall SVB or any Affiliated Party have any liability to Applicant or any other person for any action taken, or any failure to act, with respect to the Credit or this Application and Agreement if done in good faith.

7. Each Applicant waives: (i) any right at law or in equity to require SVB to: (a) proceed against any person, including any other Applicant or any guarantor; (b) proceed against or exhaust any collateral held for the obligations of Applicant hereunder; (e) pursue any other remedy in SVB's power; or (d) make any presentment, demand for performance, or give any notice of nonperformance, protest, notice of protest or notice of dishonor in connection with such Applicant's obligations hereunder; (ii) any defense arising by reason of: (a) the incapacity, lack of authority, death or disability of, or other defense available to, Applicant or any other person, including the insolvency or bankruptcy of any Applicant or any other person, or any stay in connection with any such proceeding, or the failure of Beneficiary to file or enforce a claim against the estate (in administration, bankruptcy, or any other proceeding) of any Applicant or any other person; or (b) any act or omission by SVB which directly or indirectly results in or aids the discharge or release of any party obligated hereunder, any other person, or any collateral. Fact Applicant represents that each of the above waivers are made with full knowledge that events giving rise to any defense waived may adversely affect rights which Applicant otherwise may have against the other Applicant, SVB or other persons or against any collateral.

8. Applicant represents and warrants to SVB that: (i) this Application and Agreement has been duly authorized, executed and delivered by Applicant and constitutes the valid and binding obligation of Applicant, enforceable against Applicant in accordance with its terms,(ii) Applicant and the parties with whom Applicant conducts business arc reputable and are not using SVB as a conduit for money laundering or other illicit purposes; (iii) none of Applicant's transactions supported by the Credit is prohibited by any applicable law, regulation, rule, order, or judgment; and (iv) none of Applicant's employees is a national of a designated blocked country or "Specially Designated National," "Blocked entity," Specially Designated Terrorist," "Specially Designated Narcotics Trafficker," or 'Foreign Terrorist Organization," as defined by the United States Office of Foreign Assets Control.

9. Each of the following shall constitute an "Event of Default" under this Application and Agreement: (i) Applicant fails to pay or perform any of Applicant's obligations hereunder or there occurs a default tinder any other agreement between Applicant and SVB; (ii) there occurs a material impairment in the perfection or priority of SVB's lien on any collateral or if the value of such collateral falls below the aggregate amount of Applicant's obligations under this Agreement (including =drawn amounts under the Credit); (iii) there occurs a material adverse change in the business, operations, or condition (financial or otherwise) of Applicant or a material impairment of the prospect of repayment of any portion of the obligations tinder this Agreement (iv) a petition is filed by or against Applicant for any relief under any bankruptcy or other law relating to the relief of debtors; (v) any governmental authority, receiver or court takes possession of or exercises control over any substantial part of the property of Applicant; or (vi) any court order, injunction or other legal process is issued restraining or seeking to restrain any draw or payment under the Credit. Upon occurrence of an Event of Default, unless SVB shall otherwise elect, any and all obligations and liabilities of Applicant to SVB shall become due and payable without notice or demand and SVB may exercise all rights, powers and remedies available to it, at law, in equity or otherwise. In addition, if Applicant's obligations hereunder are not fully secured by cash deposited with SVB, then, upon the occurrence of an Event of Default, Applicant will deposit with SVR, as cash security for Applicant's obligations hereunder, an amount equal to the undrawn amount of the Credit, Applicant hereby being automatically deemed to have granted to SVB a first perfected security interest in such cash and to have irrevocably authorized SVB to debit such cash on account of future drawings.

10. Applicant understands that the final form of the Credit may vary from the wording specified in the Application, and Applicant authorizes SVB to make such changes not materially inconsistent with the Application as SVB deems necessary or appropriate. If Applicant includes in the Application any language describing events or conditions that would not be possible for SVB to verify solely from the documents required to be presented under the Credit, Applicant acknowledges and agrees that SVB has no obligation to verify compliance with such requirements or conditions.

11. This Application and Agreement and all other agreements and instruments required by SVB in connection herewith shall be governed by and construed in accordance with the internal laws of the State of California. The Credit and the rights and duties of SVB there under and the obligations of Applicant with respect thereto shall, unless the Credit otherwise expressly so provides, be subject to the International Standby Practices 1998 — ICC ISP98 (or such later revision as may be published by the Institute of International Banking law & Practice). Applicant and SVB each submit to the exclusive jurisdiction of the State and Federal courts in Santa Clara County, California,

12. Applicant agrees that: SVB may issue or amend the Credit or otherwise act on instructions received by facsimile transmission (a "Faxed Application") or scanned image transmitted by email (a "Scanned Application"). Applicant accepts all risks that any Faxed Application or Scanned Application is not genuine, accurate or authorized.

13. TO THE EXTENT PERMITTED BY LAW, APPLICANT AND SVB EACH WAIVE THEIR RIGHT TO A JURY TRIAL OF ANY CLAIM OR CAUSE OF ACTION ARISING OUT OF THE CREDIT OR THIS APPLICATION AND AGREEMENT, INCLUDING CONTRACT, TORT, BREACH OF DUTY AND ALL OTHER CLAIMS. THIS WAIVER IS A MATERIAL INDUCEMENT FOR BOTH PARTIES TO ENTER INTO THIS AGREEMENT. EACH PARTY HAS REVIEWED THIS WAIVER WITH ITS COUNSEL. In the event the foregoing waiver is held unenforceable (as finally determined by a court of competent jurisdiction) Applicant and SVB agree that all disputes arising out of or in connection with the Credit, this Application and Agreement or the transactions contemplated hereby shall be resolved by a judicial reference proceeding pursuant to California Code of Civil Procedure Section 638. The judicial referee appointed to decide the judicial reference proceeding shall be empowered to hear and resolve any and all issues in the proceeding, whether of fact or law.

14. If the Applicant named on the face page of this Application and Agreement is a different party than the Account Party, such Applicant irrevocably agrees that the Account Party has the sole right to give instructions and make agreements and amendments with respect to this Application and Agreement and the Credit and that such Applicant shall automatically he deemed to be in accord therewith and bound thereby.

15. Applicant and any other party hereto may execute this Application by electronic means and each party hereto recognizes and accepts the use of electronic signatures and records by any other party hereto in connection with the execution and storage hereof.

Notice: The Federal Equal Credit Opportunity Act prohibits creditors from discriminating against credit applicants on the basis of race, color, religion, national origin, sex, marital status, age (provided the Applicant has the capacity to enter into a binding contract); because all or part of the Applicant's income derives from any public assistance program; or because the Applicant has in good faith exercised any right under the Consumer Credit Protection Act. The federal agency that administers compliance with this law concerning this creditor is the Bureau of Consumer Financial Protection, 1700 G Street NW, Washington DC 20006.

Applicant: Solazyme, Inc. **Date:** April 12, 2016

☒ Authorizes Silicon Valley Bank (the "Bank") to debit the amount of $12,635,350.50 from the Account Number _____ to establish the Collateral Money Market Account (the "Deposit Account") for the following requested Bank Services: (please choose only one - a separate pledge agreement is required for each)

☒ Letters of Credit ☐ Merchant Services ☐ Business Credit Card ☐ ACH Services
☐ Foreign Currency Exchange Service (FX Service)

Applicant requests the services checked above (the "Bank Services") through Silicon Valley Bank ("Bank") pursuant to letter of credit applications and/or cash management services agreements executed from time to time by Applicant (the "Client Agreements"). To induce Bank to provide such Services, Applicant agrees to enter into this Pledge Agreement.

GRANT OF SECURITY INTEREST. Applicant pledges and grants to Bank a security interest in the Deposit Account and in any and all monies at any time held therein with all interest and income thereon, all documents, instruments and agreements evidencing the Deposit Account and all renewals and replacements of, additions to and proceeds of any of the same (the "Collateral") to secure payment and performance of Applicant's existing and future obligations under this Pledge Agreement and in the Client Agreements (collectively the "Documents"). In the event the Bank determines at any time that the value of the Collateral is less than Applicant's existing obligations under the Documents or if Applicant requests additional Services, Applicant will pledge to Bank such additional Collateral as Bank may reasonably require. Bank may place a hold on the Deposit Account and may hold the Collateral following the date all obligations secured hereby are paid in full for such period as may be provided in the applicable Client Agreement.

AGREEMENTS. Applicant agrees that it shall not pledge, assign, transfer or otherwise dispose of any part of the Collateral, or create or permit to exist any security interest or other encumbrance on the Collateral other than in favor of Bank. Applicant will execute and deliver any documents that Bank may request to perfect and continue Bank's security interest in the Collateral. Applicant irrevocably appoints Bank as Applicant's attorney-in-fact to take any action and to execute any instrument to accomplish the purposes of this Pledge Agreement regardless of whether an Event of Default (as defined below) has occurred. Applicant agrees to indemnify and hold Bank and its directors, officers, employees, agents, and attorneys harmless against all claims, losses, liabilities, damages and expenses (including reasonable attorneys' fees), that Bank incurs in connection with this Pledge Agreement, including in connection with its exercise of rights and remedies following an Event of Default, except to the extent such result directly from the gross negligence or willful misconduct of the party seeking indemnification. Such indemnification obligation will survive until the Documents have terminated and all obligations secured hereby are paid in full.

DEFAULT AND REMEDIES. Upon the occurrence of any of the following (each, an "Event of Default"): (a) Applicant fails to pay or perform any obligation under the Documents or under any other agreement between Applicant and Bank when due or there shall otherwise occur a default thereunder, (b) Bank's security interest in the Collateral ceases to be a first priority perfected security interest; (c) there occurs a material adverse change in the business, operations or condition (financial or otherwise) of Applicant or a material impairment of the prospect of repayment of any portion of Applicant's obligations under the Documents; (e) Applicant becomes insolvent; or (f) a petition is filed by or against Applicant for relief under any bankruptcy or other debtor relief law, then, unless Bank chooses otherwise, any and all obligations of Applicant to Bank under the Documents shall be due and payable in full without notice or demand and Bank may exercise all rights and remedies available to it, at law, in equity and otherwise, including rights of a secured party under the Uniform Commercial Code.

MISCELLANEOUS. Bank and Applicant agree that this Pledge Agreement will be governed exclusively by the laws of the State of California irrespective of conflict of laws principles. Bank and Applicant each submit to the exclusive jurisdiction of the State and Federal courts in Santa Clara County, California. TO THE EXTENT PERMITTED BY LAW, APPLICANT AND BANK EACH WAIVE THEIR RIGHT TO A JURY TRIAL OF ANY CLAIM OR CAUSE OF ACTION IN CONNECTION WITH THE DOCUMENTS, INCLUDING CONTRACT, TORT, BREACH OF DUTY AND ALL OTHER CLAIMS, THIS WAIVER IS A MATERIAL INDUCEMENT FOR APPLICANT TO DELIVER THIS PLEDGE AGREEMENT AND FOR BANK TO PROVIDE THE SERVICES. EACH PARTY HAS REVIEWED THIS WAIVER WITH ITS COUNSEL. In the event the foregoing waiver is held unenforceable (as finally determined by a court of competent jurisdiction) Applicant and Bank agree that all disputes arising out of or in connection with the Documents or the transactions contemplated hereby shall be resolved by a judicial reference proceeding pursuant to California Code of Civil Procedure Section 638. The judicial referee appointed to decide the judicial reference proceeding shall be empowered to hear and resolve any and all issues in the proceeding, whether of fact or law.

/s/ Jonathan Wolfson	Jonathan Wolfson	Chief Executive Officer
/s/ Tyler Painter	Tyler Painter	Chief Financial Officer
Signature	Print Name	Title

If the Applicant has not already executed an incumbency certification, borrowing resolution or other authorization document permitting the Applicant and the signer above to take the actions identified below, then the Applicant must complete the below certification.

I, the Secretary or Assistant Secretary of _____ ("Applicant") , certify that Applicant is an existing corporation, limited liability company or partnership (whichever is applicable) under the laws of the State or Commonwealth of _____. I certify that at a duly held meeting of Applicant's Directors (or by other authorized corporate action) the following resolutions were adopted.

Resolved that any one of the following officers of Applicant, whose name, title and signature appear below:

Print Name Signature Title

__ __ __

__ __ __

may: (a) act for Applicant; (b) execute any documents Bank requires; (c) grant Bank a security interest in property and assets of Applicant, including deposit accounts maintained with Bank; (d) apply for letters of credit and cash management services, including merchant services, business credit cards, automated clearing house transactions and foreign currency exchange services, through Bank; (e) designate other individuals to request advances, pay obligations owed Bank and execute other documents or agreements (including those that waive Applicant's right to a jury trial) which such officer thinks appropriate to effectuate these Resolutions.

Further resolved that all acts authorized by these Resolutions and performed before they were adopted are ratified.

Bank may rely on these resolutions until Bank receives written notice of their revocation for the transaction contemplated in this Agreement and for future similar transactions. I certify that the persons listed above are Applicant's officers with the titles and signatures shown following their names and that these resolutions have not been modified and are currently effective.

X __ __

Secretary or Assistant Secretary Date

If the certifying officer is designated as a signer in these resolutions, then another corporate officer must also sign below:

X __ __

Corporate Officer Date

If the Applicant has only one officer, please sign below as both Secretary and as an authorized officer:

X __ __

I attest that I am the only officer of the Applicant.

For SVB Internal Use

Collateral Money Market Account (the "Deposit Account") Number: _____ established on _____.

Date of previously executed incumbency certificate, borrowing resolution or other authorization document: _____

SVB employee signature verifying date of previously signed incumbency certificate, borrowing resolution or other authorization document:

— — — —

SVB Employee Signature Print Name Title Date

Exhibit 31.1

CERTIFICATION OF PRINCIPAL EXECUTIVE OFFICER
(Pursuant to Rule 13a -14(a) or Rule 15d-14(a) of the
Securities Exchange Act of 1934, as amended,
as Adopted Pursuant to Section 302 of the Sarbanes-Oxley Act of 2002)

I, Jonathan S. Wolfson, certify that:

1. I have reviewed this Quarterly Report on Form 10-Q of TerraVia Holdings, 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: August 8, 2016

/s/ Jonathan Wolfson

Jonathan Wolfson
Chief Executive Officer and Chairman of the Board
(Principal Executive Officer)

Exhibit 31.2

CERTIFICATION OF PRINCIPAL FINANCIAL OFFICER
(Pursuant to Rule 13a -14(a) or Rule 15d-14(a) of the
Securities Exchange Act of 1934, as amended,
as Adopted Pursuant to Section 302 of the Sarbanes-Oxley Act of 2002)

I, Tyler W. Painter, certify that:

1. I have reviewed this Quarterly Report on Form 10-Q of TerraVia Holdings, 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 13a015(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: August 8, 2016

/ S / T YLER W. P AINTER

Tyler W. Painter
Chief Operating Officer and
Chief Financial Officer
(Principal Financial Officer)

Exhibit 32.1

CERTIFICATIONS 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 TerraVia Holdings, Inc. (the "Company") on Form 10-Q for the quarter ended June 30, 2016 , as filed with the Securities and Exchange Commission (the "Report"), each of Jonathan S. Wolfson, Chief Executive Officer and Chairman of the Board of the Company and Tyler W. Painter, Chief Operating Officer and Chief Financial Officer of the Company, respectively, do each hereby certify, pursuant to 18 U.S.C. Section 1350, as adopted pursuant to Section 906 of the Sarbanes-Oxley Act of 2002, that, to the best of his knowledge:

- The Report fully complies with the requirements of Section 13(a) or 15(d) of the Securities Exchange Act of 1934, as amended; and
- The information contained in the Report fairly presents, in all material respects, the financial condition and results of operations of the Company.

/s/ JONATHAN W OLFSON

Jonathan Wolfson
Chief Executive Officer and Chairman of the Board

Date: August 8, 2016

/ S / TYLER W. PAINTER

Tyler W. Painter
Chief Operating Officer and
Chief Financial Officer

Date: August 8, 2016

A signed original of this written statement required by Section 906 has been provided to the Company and will be retained by the Company and furnished to the Securities and Exchange Commission or its staff upon request.

This certification accompanies the Report to which it relates, is not deemed filed with the SEC and is not to be incorporated by reference into any filing of the Company under the Securities Act of 1933, as amended, whether made before or after the date of the Report and irrespective of any general incorporation language contained in such filing.