UNITED STATES SECURITIES AND EXCHANGE COMMISSION

Washington, D.C. 20549

		rukwi 10-Q	
(Mark	One)		
otin	QUARTERLY REPORT PURSUANT T For the quarterly period ended September OR		HE SECURITIES EXCHANGE ACT OF 1934
	TRANSITION REPORT PURSUANT To the transition period from to	* /	HE SECURITIES EXCHANGE ACT OF 1934
		Commission file number: 1-13648	
	Balc	hem Corpora	tion
	(Exact nar	me of Registrant as specified in its	s charter)
(State	Maryland or other jurisdiction of incorporation or or	ganization) (I.R	13-2578432 a.S. Employer Identification Number)
Securi	(Address Registrant's teleph ties registered pursuant to Section 12(b) of		ip Code) : (845) 326-5600
C	Title of each class	Trading symbol	Name of each exchange on which registered
Comn	non Stock, par value \$.06-2/3 per share	ВСРС	Nasdaq Global Market
Excharand (2) Indicarpursua the regular reporting growth	nge Act of 1934 during the preceding 12 m.) has been subject to such filing requirement to by check mark whether the registrant hant to Rule 405 of Regulation S-T (§232.40 gistrant was required to submit such files). The by check mark whether the Registrant is	onths (or such shorter period that ints for the past 90 days. Yes ☑ No as submitted electronically every 5 of this chapter) during the preceives ☑ No □ a large accelerated filer, an accelerated filer, "accelerated filer Act.	Interactive Data File required to be submitted eding 12 months (or for such shorter period that erated filer, a non-accelerated filer, or a smaller r," "smaller reporting company," and "emerging
	emerging growth company, indicate by che ying with any new or revised financial according		ted not to use the extended transition period for ant to Section 13(a) of the Exchange Act. □

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

As of October 30, 2019, the registrant had 32,168,837 shares of its Common Stock, \$.06 2/3 par value, outstanding.

QUARTERLY REPORT ON FORM 10-Q

TABLE OF CONTENTS

		Page No.
PART I	FINANACIAL INFORMATION	
Item 1.	Financial Statements (unaudited)	
	Condensed Consolidated Balance Sheets as of September 30, 2019 and December 31, 2018	<u>3</u>
		-
	Condensed Consolidated Statements of Earnings for the Three and Nine Months	
	Ended September 30, 2019 and 2018	<u>4</u>
	Condensed Consolidated Statements of Comprehensive Income for the Three and	
	Nine Months Ended September 30, 2019 and 2018	<u>5</u>
	Condensed Consolidated Statements of Changes in Stockholders' Equity for the Three and Nine Months Ended September 30, 2019 and 2018	<u>6</u>
	Three and Nine World's Ended September 30, 2019 and 2016	<u>0</u>
	Condensed Consolidated Statements of Cash Flows for the Nine Months Ended	
	September 30, 2019 and 2018	<u>8</u>
	Notes to Condensed Consolidated Financial Statements	<u>9</u>
	Management's Discussion and Analysis of Financial Condition and Results of	
Item 2.	Operations Operations	<u>27</u>
Item 3.	Quantitative and Qualitative Disclosures About Market Risk	<u>33</u>
Item 4.	Controls and Procedures	33
<u>1tcm 4.</u>	Controls and Procedures	<u>33</u>
PART II	OTHER INFORMATION	
Item 1A.	Risk Factors	<u>34</u>
Item 2C.	Issuer Purchase of Equity Securities	<u>34</u>
Item 6.	<u>Exhibits</u>	2.4
10111 0.	LAHIUIS	<u>34</u>
SIGNATI	JRE PAGE	<u>35</u>

Part I. Financial Information

Item 1. Financial Statements

BALCHEM CORPORATION

Condensed Consolidated Balance Sheets

(Dollars in thousands, except share and per share data)

<u>Assets</u>	September 30, 2019 (unaudited)	December 31, 2018
Current assets:		
Cash and cash equivalents	\$ 59,404	\$ 54,268
Accounts receivable, net of allowance for doubtful accounts of \$1,354 and \$610 at September 30, 2019 and December 31, 2018 respectively	93,995	99,545
Inventories	73,830	67,187
Prepaid expenses	4,10	3,830
Prepaid income taxes	5,448	-
Other current assets	3,163	1,484
Total current assets	239,949	226,314
Property, plant and equipment, net	200,803	190,919
Goodwill	504,094	
Intangible assets with finite lives, net	134,39	,
Right of use assets	6,60	
Derivative assets	2,17	_
Other assets	8,61	6,722
Total assets	\$ 1,096,628	\$ 981,355
Liabilities and Stockholders' Equity		
Current liabilities:		
Trade accounts payable	\$ 36,739	\$ 33,345
Accrued expenses	22,693	22,025
Accrued compensation and other benefits	10,29:	11,022
Dividends payable	78	15,220
Income tax payable	_	- 444
Lease liabilities - current	2,218	_
Total current liabilities	72,023	82,056
Revolving loan	218,569	156,000
Deferred income taxes	57,008	44,309
Lease liabilities - non-current	4,36	_
Derivative liabilities	2,475	-
Other long-term obligations	8,600	
Total liabilities	363,042	289,737
Commitments and contingencies (Note 16)		
Stockholders' equity:		
Preferred stock, \$25 par value. Authorized 2,000,000 shares; none issued and outstanding	_	_
Common stock, \$.0667 par value. Authorized 120,000,000 shares; 32,401,586 shares issued and 32,169,087 shares outstanding at September 30, 2019 and 32,256,915 shares issued and 32,256,209 outstanding at December 31, 2018,		
respectively	2,160	2,151
Additional paid-in capital	173,760	165,098
Retained earnings	587,31:	528,027
Accumulated other comprehensive loss	(9,05	(3,602)
Treasury stock, at cost: 232,499 and 706 shares at September 30, 2019 and December 31, 2018, respectively	(20,594	(56)
Total stockholders' equity	733,580	<u> </u>
Total liabilities and stockholders' equity	\$ 1,096,628	\$ 981,355

Condensed Consolidated Statements of Earnings

(Dollars in thousands, except per share data) (unaudited)

		Three Mor Septem		Nine Months Ended September 30,				
		2019	2018		2019		2018	
Net sales	\$	158,595	\$ 155,043	\$	477,178	\$	480,140	
Cost of sales		104,587	107,041		320,157		327,213	
Gross margin		54,008	48,002		157,021		152,927	
Operating expenses:								
Selling expenses		15,227	14,229		44,847		42,783	
Research and development expenses		2,699	2,540		8,446		8,339	
General and administrative expenses		10,052	5,710		24,816		21,939	
		27,978	22,479		78,109		73,061	
Earnings from operations		26,030	25,523		78,912		79,866	
Other expenses:								
Interest expense, net		1,672	1,797		4,749		5,936	
Other, net		(78)	197		53		163	
		1,594	1,994		4,802		6,099	
Earnings before income tax expense	_	24,436	 23,529	_	74,110		73,767	
Income tax expense		3,760	4,315		14,822		15,528	
Net earnings	\$	20,676	\$ 19,214	\$	59,288	\$	58,239	
				_				
Net earnings per common share - basic	\$	0.64	\$ 0.60	\$	1.84	\$	1.82	
Net earnings per common share - diluted	\$	0.64	\$ 0.59	\$	1.82	\$	1.79	

Condensed Consolidated Statements of Comprehensive Income

(Dollars in thousands) (unaudited)

	Three Months Ended September 30,					Nine Months Ended September 30,				
	2019		_	2018	_	2019	_	2018		
Not cornings	\$	20,676	\$	19,214	\$	59,288	\$	58,239		
Net earnings	Ф	20,070	Ф	19,214	Ф	39,200	Ф	38,239		
Other comprehensive (loss) income, net of tax:										
Net foreign currency translation adjustment		(2,209)		(545)		(3,513)		(2,093)		
Unrealized loss on cash flow hedge, net		(657)		_		(1,956)		_		
Net change in postretirement benefit plans		5		9		16		38		
Other comprehensive loss		(2,861)		(536)		(5,453)		(2,055)		
Comprehensive income	\$	17,815	\$	18,678	\$	53,835	\$	56,184		

Condensed Consolidated Statements of Changes in Stockholders' Equity For the three and nine months ended September 30, 2019 and 2018

(Dollars in thousands, except share and per share data)

	~.	Total		Accumulated Other	Commo	n S	tock	Treasur	Additional		
	Sto	ckholders' Equity	Retained Earnings	Comprehensive (Loss) Income	Shares		Amount	Shares	Amount	Paid-in Capital	
Balance - December 31, 2018	\$	691,618	\$ 528,027	\$ (3,602)	32,256,915	\$	2,151	(706)	\$ (56)	\$ 165,098	
Net earnings		18,783	18,783					_	_		
Other comprehensive (loss)		(1,084)		(1,084)	_		_	_	_	_	
Treasury shares purchased		(727)						(8,496)	(727)		
Shares and options issued under stock plans		1,919	_	_	79,313		5	3,006	250	1,664	
Balance - March 31, 2019		710,509	546,810	(4,686)	32,336,228		2,156	(6,196)	(533)	166,762	
Net earnings		19,829	19,829	_						_	
Other comprehensive (loss)		(1,508)		(1,508)				_	_	_	
Shares and options issued under stock plans		3,515	_	_	19,068		1	6,196	533	2,981	
Balance - June 30, 2019		732,345	566,639	(6,194)	32,355,296		2,157			169,743	
Net earnings		20,676	20,676	_	_					_	
Other comprehensive (loss)		(2,861)		(2,861)				_	_	_	
Treasury shares purchased		(20,594)		_	_			(232,499)	(20,594)	_	
Shares and options issued under stock plans		4,020	_	_	46,290		3	_	_	4,017	
Balance - September 30, 2019	\$	733,586	\$ 587,315	\$ (9,055)	32,401,586	\$ 2,160		(232,499)	\$ (20,594)	\$ 173,760	

Condensed Consolidated Statements of Changes in Stockholders' Equity (continued) For the three and nine months ended September 30, 2019 and 2018

(Dollars in thousands, except share and per share data)

		Total		umulated Other	Commo	on S	Stock	Treasury Stock			Additional	
	Sto	ckholders' Equity	Retained Earnings	prehensive s) Income	Shares		Amount	Shares	s Amoun			Paid-in Capital
Balance - December 31, 2017	\$	616,881	\$ 464,639	\$ (1,642)	32,019,605	\$	2,135	-	= '	\$	\$	151,749
Net earnings		19,346	19,346	_	_		_	_	_			_
Other comprehensive income		1,376	_	1,376	_		_	-	_	_		_
Dividends		1	1					_	_			_
Treasury shares purchased		(786)			_			(10,45	4)	(786)		_
Shares and options issued under stock plans		3,072	_	_	80,505		5	10,45	4	786		2,281
Balance - March 31, 2018		639,890	483,986	(266)	32,100,110		2,140	_		_		154,030
Net earnings		19,679	19,679		_				_			_
Other comprehensive (loss)		(2,895)		(2,895)	_			_	_	_		_
Treasury shares purchased		(437)			_			(4,40	8)	(437)		_
Shares and options issued under stock plans		6,983			112,984		8	_	_	_		6,975
Balance - June 30, 2018		663,220	503,665	(3,161)	32,213,094		2,148	(4,40	8)	(437)		161,005
Net earnings		19,214	19,214	_	_		_	_	_	_		_
Other comprehensive (loss)		(536)		(536)	_		_	_	_	_		_
Shares and options issued under stock plans		3,304	_	<u> </u>	37,058		2	4,40	8	437		2,865
Balance - September 30, 2018	\$	685,202	\$ 522,879	\$ (3,697)	32,250,152	\$	2,150			<u>\$</u>	\$	163,870

Condensed Consolidated Statements of Cash Flows

(Dollars in thousands) (unaudited)

		Nine Months Ende September 30,		
		2019		2018
Cash flows from operating activities:				
Net earnings	\$	59,288	\$	58,239
Adjustments to reconcile net earnings to net cash provided by operating activities:				
Depreciation and amortization		33,485		33,460
Stock compensation expense		5,717		5,208
Deferred income taxes		(198)		(140)
Provision for (recovery of) doubtful accounts		896		(12)
Foreign currency transaction loss		21		(134)
Asset impairment charge		114		1,671
Gain on disposal of assets		(3,220)		(3,093)
Changes in assets and liabilities				
Accounts receivable		8,340		(9,226)
Inventories		(6,017)		(10,538)
Prepaid expenses and other current assets		(784)		1,315
Accounts payable and accrued expenses		(145)		5,426
Income taxes		(5,955)		(3,903)
Other		(48)		912
Net cash provided by operating activities		91,494		79,185
1 , 1		, , , , , , , , , , , , , , , , , , ,		ĺ
Cash flows from investing activities:				
Cash paid for acquisition, net of cash acquired		(94,690)		(17,399)
Capital expenditures and intangible assets acquired		(21,669)		(13,691)
Proceeds from insurance		2,727		4,165
Proceeds from sale of business and assets		11,523		576
Purchase of convertible note		(1,000)		_
Net cash used in investing activities		(103,109)		(26,349)
Cook flows from from in a optivities.				
Cash flows from financing activities: Proceeds from revolving loan		123,569		210,750
Principal payments on revolving loan		(61,000)		(32,750)
Principal payments on long-term debt		(01,000)		(219,500)
Principal payments on acquired debt		(12,222)		(219,300)
Cash paid for financing costs		(12,222)		(1,374)
Proceeds from stock options exercised		3,734		8,133
Dividends paid		(15,135)		
Purchase of treasury stock		(13,133) $(21,321)$		(13,428)
Net cash provided by (used in) financing activities		17,625		(1,223)
Net cash provided by (used in) linancing activities	<u> </u>	17,023	_	(49,411)
Effect of exchange rate changes on cash		(874)		(1,170)
Increase in cash and cash equivalents		5,136		2,255
Cash and cash equivalents beginning of period		54,268		40,416
Cash and cash equivalents end of period	\$	59,404	\$	42,671

NOTES TO CONDENSED CONSOLIDATED FINANCIAL STATEMENTS (UNAUDITED)

(All dollar amounts in thousands, except share and per share data)

NOTE 1 – CONDENSED CONSOLIDATED FINANCIAL STATEMENTS

The condensed consolidated financial statements presented herein have been prepared in accordance with the accounting policies described in its December 31, 2018 consolidated financial statements, and should be read in conjunction with the consolidated financial statements and notes, which appear in the Annual Report on Form 10-K for the year ended December 31, 2018. The condensed consolidated financial statements reflect the operations of Balchem Corporation and its subsidiaries (the "Company"). All intercompany balances and transactions have been eliminated in consolidation.

In the opinion of management, the unaudited condensed consolidated financial statements furnished in this Form 10-Q include all adjustments necessary for a fair presentation of the financial position, results of operations and cash flows for the interim periods presented. All such adjustments are of a normal recurring nature. The condensed consolidated financial statements have been prepared in accordance with U.S. generally accepted accounting principles ("U.S. GAAP" or "GAAP") governing interim financial statements and the instructions to Form 10-Q and Article 10 of Regulation S-X under the Securities Exchange Act of 1934 (the "Exchange Act") and therefore do not include some information and notes necessary to conform to annual reporting requirements. The results of operations for the three and nine months ended September 30, 2019 are not necessarily indicative of the operating results expected for the full year or any interim period.

Certain reclassifications have been made to prior period amounts to conform with the current period's presentation.

Recent Accounting Pronouncements

Recently Issued Accounting Standards

In July 2019, the FASB issued Accounting Standards Update ("ASU") 2019-07, "Codification Updates to SEC Sections," which improved, updated, and simplified regulations on financial reporting and disclosure. The Company does not expect this new guidance to have a significant impact on its financial reporting.

In May and April 2019, the FASB issued Accounting Standards Update ("ASU") 2019-05 and ASU 2019-04, "Codification Improvements to Topic 326, Financial Instruments - Credit Losses" which further clarifies the ASU 2016-13, "Financial Instruments - Credit Losses (Topic 326). In June 2016, the FASB issued ASU No. 2016-13 which requires that credit losses be reported based on expected losses compared to the current incurred loss model. These updates made several consequential amendments to the Codification which requires the accounting for available-for-sale debt securities to be individually assessed for credit losses when fair value is less than the amortized cost basis. The standard is effective for interim and annual periods beginning after December 15, 2019 with early adoption permitted. The Company does not expect this new guidance to have a significant impact on its financial reporting.

In August 2018, the FASB issued ASU 2018-15, "Customer's Accounting for Implementation Costs Incurred in a Cloud Computing Arrangement that is a Service Contract." The guidance requires implementation costs incurred by customers in cloud computing arrangements to be deferred over the noncancelable term of the cloud computing arrangements plus any optional renewal periods (1) that are reasonably certain to be exercised by the customer or (2) for which exercise of the renewal option is controlled by the cloud service provider. The effective date of this pronouncement is for fiscal years beginning after December 15, 2019, and interim periods within those fiscal years. Early adoption is permitted and the standard may be adopted either using the prospective or retrospective transition approach. The Company is currently evaluating the impact of this pronouncement on the Company's consolidated financial statements and disclosures.

In August 2018, the FASB issued ASU 2018-14, "Disclosure Framework-Changes to the Disclosure Requirements for Defined Benefit Plans," which modifies the disclosure requirements for employers that sponsor defined benefit pension or other postretirement benefit plans. The guidance removes disclosures that are no longer considered cost beneficial, clarifies the specific requirements of disclosures and adds disclosure requirements identified as relevant. This update should be applied on a retrospective basis to all periods presented and is effective for fiscal years ending after December 31, 2020. Early adoption is permitted. The Company expects this new guidance will not have a significant impact on its financial reporting.

In January 2017, the FASB issued ASU No. 2017-04, "Simplifying the Test for Goodwill Impairment" (ASU 2017-04), which addresses changes to the testing for goodwill impairment by eliminating Step 2 of the process. The guidance is effective for annual and interim goodwill impairment tests in fiscal years beginning after December 15, 2019. Early adoption is permitted; however, the Company has elected not to adopt early as this ASU will not have a significant impact on the Company's consolidated financial statements.

Recently Adopted Accounting Standards

In August 2017, the FASB issued ASU No. 2017-12, Derivatives and Hedging (Topic 815): Targeted Improvements to Accounting for Hedging Activities. The guidance was issued with the objective of improving the financial reporting of hedging relationships to better portray the economic results of companies' risk management activities in its financial statements, as well as simplifying the application of hedge accounting guidance especially in the area of assessment of effectiveness of the hedge. In April 2019, the FASB issued ASU 2019-04, "Codification Improvements to Topic 815, Derivative and Hedging", which further clarified ASU 2017-12. The amendments are effective for fiscal years beginning after December 15, 2019, and interim periods within fiscal years beginning after December 15, 2020. Early adoption is permitted and all transaction requirements and elections should be applied to hedging relationships existing on the date of adoption. The Company has early adopted the new standards in the second quarter of 2019. Refer to Note 20, "Derivative Instruments and Hedging Activities."

In February 2016, the FASB issued ASU No. 2016-02, "Leases" ("ASU 2016-02"), which was clarified by ASU 2018-11 and addresses the recognition of assets and liabilities that arise from all leases. The guidance requires lessees to recognize right-of-use ("ROU") assets and lease liabilities for most leases in the Consolidated Balance Sheets and is effective for annual and interim periods beginning after December 15, 2018. The Company adopted the new standard on January 1, 2019 and has elected the optional transition method to account for the impact of the adoption with a cumulative-effect adjustment in the period of adoption. The new standard provides a number of optional practical expedients in transition. The Company has elected the "package of practical expedients", which permits it not to reassess under the new standard its prior conclusions about lease identification, lease classification and initial direct costs. The Company has not elected the use-of-hindsight or the practical expedient pertaining to land easements, the latter not being applicable to the Company. The new standard also provides practical expedients for an entity's ongoing accounting. The Company has elected the short-term lease recognition exemption for all leases that qualify, which means for those leases that qualify, the Company will not recognize ROU assets or lease liabilities. The Company has also elected the practical expedient to not separate lease and non-lease components for all of its leases. In March 2019, the FASB issued ASU 2019-01, "Leases (Topic 842): Codification Improvements," which further clarifies the determination of fair value of leases and modifies transition disclosure requirements for changes in accounting principles. The effective date of the amendments is for fiscal years beginning after December 15, 2019, and interim periods within those fiscal years. The Company expects this pronouncement will not have a significant impact on its consolidated financial statements and disclosures. Refer to Note 19, "Leases."

NOTE 2 – SIGNIFICANT ACQUISITIONS AND DIVESTITURES

On May 27, 2019, the Company acquired 100 percent of the outstanding common shares of Chemogas Holding NV and its subsidiaries ("Chemogas" or the "Acquisition"), a privately held specialty gases company headquartered in Grimbergen, Belgium. The Company made payments of approximately €99,503 (translated to \$111,324) on the acquisition date, amounting to approximately €88,579 (translated to \$99,102) to the former shareholders and approximately €10,924 (translated to \$12,222) to Chemogas' lender to pay Chemogas bank debt. Considering the cash acquired of €3,943 (translated to \$4,412), net payments made to the former shareholders were €84,636 (translated to \$94,690). The acquisition was primarily financed through the Company's Credit Agreement (see Note 8, "Revolving Loan"). Chemogas is a leader in the packaging and distribution of a wide variety of specialty gases, most notably ethylene oxide, primarily in the European and Asian markets, for medical device sterilization. Through its operational and logistical excellence, Chemogas supports its customers' needs across more than 70 countries. With the acquisition, the Company significantly expands its geographic presence in the packaged ethylene oxide market, enabling the Company to offer worldwide service and support to its medical device sterilization customers within the Specialty Products segment. The Chemogas sites in Europe and Asia will form a global network of facilities when combined with the Company's sites in the United States.

The goodwill of \$59,288 arising from the Acquisition consists largely of expected synergies, including the combined entities' experience and technical problem-solving capabilities, and acquired workforce. The goodwill is assigned to the Specialty Products segment and is not tax deductible for income tax purposes.

The following table summarizes the preliminary estimated fair values of the assets acquired and liabilities assumed:

Cash and cash equivalents	\$ 4,412
Accounts receivable	4,176
Inventories	957
Property, plant and equipment	15,972
Customer relationships	39,158
Developed technology	2,461
Trade name	1,119
Other assets	1,491
Accounts payable	(3,261)
Bank debt	(12,222)
Other liabilities	(937)
Pension obligations (net)	(594)
Deferred income taxes	(12,918)
Goodwill	59,288
Amount paid to shareholders	99,102
Chemogas bank debt paid on purchase date	12,222
Total amount paid on acquisition date	\$ 111,324

The estimated valuation of the fair value of tangible and intangible assets acquired and liabilities assumed are based on management's estimates and assumptions that are subject to change. In preparing our preliminary fair value estimates of the intangible assets and certain tangible assets acquired, management, among other things, consulted an independent advisor. The purchase price and related allocation to assets acquired and liabilities assumed is preliminary pending management's final review of fair value calculations and deferred tax liabilities related to certain non-deductible assets.

Customer relationships are amortized over a 20-year period utilizing an accelerated method based on the estimated average customer attrition rate. Trade name and developed technology are amortized over 2 years and 10 years, respectively, utilizing the straight-line method as the consumption pattern of the related economic benefits cannot be reliably determined.

The Company is indemnified for tax liabilities prior to the Acquisition date. Indemnified tax liabilities will create an indemnification asset (receivable). At this time, an indemnification asset balance has not been established.

In connection with this transaction, the Company incurred transaction and integration costs of \$201 and \$1,063 for the three and nine months ended September 30, 2019, respectively.

Total transaction and integration costs related to recent acquisitions and potential future transactions, including the Chemogas acquisition described above, are recorded in general and administrative expenses. These costs amounted to \$688 and \$2,253 for the three and nine months ended September 30, 2019, respectively, and \$202 and \$1,784 for the three and nine months ended September 30, 2018, respectively.

Divestiture

On September 6, 2019, the Company sold an insignificant portion of its business. As a result of the transaction, the Company recorded a gain on sale, which was immaterial to the consolidated financial statements and included in general and administrative expenses. Operating results for the portion of the business sold were insignificant relative to the Company's consolidated financial results for the three and nine months ended September 30, 2019.

NOTE 3 – STOCKHOLDERS' EQUITY

STOCK-BASED COMPENSATION

The Company's results for the three and nine months ended September 30, 2019 and 2018 reflected the following stock-based compensation cost, and such compensation cost had the following effects on net earnings:

	Three Months Ended September 30,			Increase/(Decrease) for th Nine Months Ended September 30,				
	2019		2018		2019		2018	
Cost of sales	\$ 288	\$	242	\$	864	\$	729	
Operating expenses	1,807		1,507		4,853		4,479	
Net earnings	(1,610)		(1,339)		(4,401)		(3,996)	

As allowed by ASC 718, the Company has made an estimate of expected forfeitures based on its historical experience and is recognizing compensation cost only for those stock-based compensation awards expected to vest.

The Company's stock incentive plans allow for the granting of stock awards and options to purchase common stock. Both incentive stock options and nonqualified stock options can be awarded under the plans. No option will be exercisable for longer than ten years after the date of grant. The Company has approved and reserved a number of shares to be issued upon exercise of the outstanding options that is adequate to cover all exercises. As of September 30, 2019, the plans had 1,104,124 shares available for future awards. Compensation expense for stock options and stock awards is recognized on a straight-line basis over the vesting period, generally three years for stock options, three to four years for employee restricted stock awards, three years for employee performance share awards, and three to four years for non-employee director restricted stock awards. Certain awards provide for accelerated vesting if there is a change in control (as defined in the plans) or other qualifying events.

Option activity for the nine months ended September 30, 2019 and 2018 is summarized below:

For the nine months ended September 30, 2019	Shares (000s)	Weighted Average Exercise Price	Aggregate Intrinsic Value	Weighted Average Remaining Contractual Term
Outstanding as of December 31, 2018	887	\$ 61.59	\$ 16,192	
Granted	187	84.29		
Exercised	(82)	45.44		
Forfeited	(11)	80.38		
Canceled	(4)	70.90		
Outstanding as of September 30, 2019	977	\$ 67.06	\$ 31,356	6.5
Exercisable as of September 30, 2019	608	\$ 58.25	\$ 24,904	5.1

For the nine months ended September 30, 2018	Shares (000s)	Weighted Average Exercise Price	Aggregate Intrinsic Value	Weighted Average Remaining Contractual Term
Outstanding as of December 31, 2017	946	\$ 55.44	\$ 24,714	
Granted	148	74.57		
Exercised	(191)	42.74		
Forfeited	(2)	75.44		
Canceled	(1)	28.63		
Outstanding as of September 30, 2018	900	\$ 61.27	\$ 45,745	6.5
Exercisable as of September 30, 2018	496	\$ 49.88	\$ 30,875	5.1

ASC 718 requires companies to measure the cost of employee services received in exchange for an award of equity instruments based on the grant-date fair value of the award. The fair value of each option grant is estimated on the date of the grant using the Black-Scholes option-pricing model with the following weighted average assumptions: dividend yields of 0.6% and 0.6%; expected volatilities of 24% and 27%; risk-free interest rates of 2.5% and 2.6%; and expected lives of 4.0 years and 4.4 years, in each case for the nine months ended September 30, 2019 and 2018, respectively.

The Company used a projected expected life for each award granted based on historical experience of employees' exercise behavior. Expected volatility is based on the Company's historical volatility levels. Dividend yields are based on the Company's historical dividend yields. Risk-free interest rates are based on the implied yields currently available on U.S. Treasury Zero coupon issues with a remaining term equal to the expected life.

Other information pertaining to option activity during the three and nine months ended September 30, 2019 and 2018 was as follows:

		Three Months Ended September 30,			Nine Mon Septem	
	<u> </u>	2019		2018	2019	2018
Weighted-average fair value of options granted	\$	_	\$	_	\$ 18.27	\$ 18.62
Total intrinsic value of stock options exercised (\$000s)	\$	3,021	\$	2,743	\$ 4,320	\$ 9,943

Non-vested restricted stock activity for the nine months ended September 30, 2019 and 2018 is summarized below:

Nine Months ended September 30, 2019	Shares (000s)	A	Veighted Average Grant Oate Fair Value
Non-vested balance as of December 31, 2018	79	\$	72.75
Granted	67		84.44
Vested	(8)		58.52
Forfeited	(5)		85.49
Non-vested balance as of September 30, 2019	133	\$	79.07

Nine months ended September 30, 2018	Shares (000s)	A Da	eighted verage Grant ate Fair Value
Non-vested balance as of December 31, 2017	66	\$	65.66
Granted	40		77.17
Vested	(17)		57.65
Forfeited			_
Non-vested balance as of September 30, 2018	89	\$	72.44

Non-vested performance share activity for the nine months ended September 30, 2019 and 2018 is summarized below:

Nine Months ended September 30, 2019	Shares (000s)	Ave Gr Date	rage ant Fair lue
Non-vested balance as of December 31, 2018	53	\$	75.61
Granted	33		81.79
Vested	(9)		65.64
Forfeited	(7)		60.85
Non-vested balance as of September 30, 2019	70	\$	81.26

Weighted

Nine months ended September 30, 2018	Shares (000s)	Weighted Average Grant Date Fair Value
Non-vested balance as of December 31, 2017	39	\$ 72.62
Granted	32	71.27
Vested	(15)	58.78
Forfeited	<u> </u>	_
Non-vested balance as of September 30, 2018	56	\$ 75.47

The performance share ("PS") awards provide the recipients the right to receive a certain number of shares of the Company's common stock in the future, subject to an EBITDA performance hurdle, where vesting is dependent upon the Company achieving a certain EBITDA percentage growth over the performance period, and relative total shareholder return (TSR) where vesting is dependent upon the Company's TSR performance over the performance period relative to a comparator group consisting of the Russell 2000 index constituents. Expense is measured based on the fair value at the date of grant utilizing a Black-Scholes methodology to produce a Monte-Carlo simulation model which allows for the incorporation of the performance hurdles that must be met before the PS vests. The assumptions used in the fair value determination were risk free interest rates of 2.5% and 2.4%; dividend yields of 0.5% and 0.5%; volatilities of 24% and 27%; and initial TSR's of -5.9% and -10.5%, in each case for the nine months ended September 30, 2019 and 2018, respectively. Expense is estimated based on the number of shares expected to vest, assuming the requisite service period is rendered and the probable outcome of the performance condition is achieved. The estimate is revised if subsequent information indicates that the actual number of shares likely to vest differs from previous estimates. Expense is ultimately adjusted based on the actual achievement of service and performance targets. The PS will cliff vest 100% at the end of the third year following the grant in accordance with the performance metrics set forth.

As of September 30, 2019 and 2018, there was \$13,001 and \$10,090, respectively, of total unrecognized compensation cost related to non-vested share-based compensation arrangements granted under the plans. As of September 30, 2019, the unrecognized compensation cost is expected to be recognized over a weighted-average period of approximately 1.5 years. The Company estimates that share-based compensation expense for the year ended December 31, 2019 will be approximately \$7,600.

REPURCHASE OF COMMON STOCK

The Company has an approved stock repurchase program. The total authorization under this program is 3,763,038 shares. Since the inception of the program in June 1999, a total of 2,431,767 shares have been purchased, of which 232,499 shares remained in treasury at September 30, 2019. During the nine months ended September 30, 2019 and 2018, a total of 240,995 and 14,862 shares, respectively, have been purchased at an average cost of \$88.47 and \$82.22 per share, respectively. The Company intends to acquire shares from time to time at prevailing market prices if and to the extent it deems it advisable to do so based on its assessment of corporate cash flow, market conditions and other factors. The Company also repurchases shares from employees in connection with settlement of transactions under the Company's equity incentive plans.

NOTE 4 – INVENTORIES

Inventories at September 30, 2019 and December 31, 2018 consisted of the following:

	September 30, 2019			cember 31, 2018
Raw materials	\$	27,521	\$	23,661
Work in progress		4,751		4,649
Finished goods		41,558		38,877
Total inventories	\$	73,830	\$	67,187

NOTE 5 - PROPERTY, PLANT AND EQUIPMENT

Property, plant and equipment at September 30, 2019 and December 31, 2018 are summarized as follows:

	Sep	tember 30, 2019	De	cember 31, 2018
Land	\$	11,427	\$	7,965
Building		73,948		67,702
Equipment		219,680		213,909
Construction in progress		17,504		14,750
		322,559		304,326
Less: accumulated depreciation		121,754		113,407
Property, plant and equipment, net	\$	200,805	\$	190,919

NOTE 6 – INTANGIBLE ASSETS

The Company had goodwill in the amount of \$504,094 and \$447,995 as of September 30, 2019 and December 31, 2018, respectively, subject to the provisions of ASC 350, "Intangibles-Goodwill and Other." The increase in goodwill is primarily the result of the acquisition of Chemogas, partially offset by a reduction of goodwill related to an insignificant sale of a portion of the Company's business, with the remaining change due to foreign exchange translation adjustments. Refer to Note 2, "Significant Acquisitions and Divestitures," for more information.

Identifiable intangible assets with finite lives at September 30, 2019 and December 31, 2018 are summarized as follows:

	Amortization Period (in years)	Ca An	Gross Carrying Amount at 9/30/2019		Gross Accumulated Carrying Amount at 12/31/2018		Accumulate Amortizatio at 12/31/201		
Customer relationships & lists	10-20	\$	230,243	\$	135,158	\$	192,185	\$	122,545
Trademarks & trade names	2-17		40,773		19,408		39,934		16,755
Developed technology	5-10		15,740		10,429		13,338		8,604
Other	3-18		20,420		7,784		18,333		6,481
		\$	307,176	\$	172,779	\$	263,790	\$	154,385

Amortization of identifiable intangible assets was approximately \$6,753 and \$18,723 for the three and nine months ended September 30, 2019, respectively, and \$6,208 and \$18,680 for the three and nine months ended September 30, 2018, respectively. Assuming no change in the gross carrying value of identifiable intangible assets, estimated amortization expense is \$7,069 for the remainder of 2019, \$26,112 for 2020, \$22,405 for 2021, \$20,546 for 2022, \$17,979 for 2023 and \$9,076 for 2024. At September 30, 2019 and 2018, there were no identifiable intangible assets with indefinite useful lives as defined by ASC 350. Identifiable intangible assets are reflected in "Intangible assets with finite lives, net" in the Company's condensed consolidated balance sheets. There were no changes to the useful lives of intangible assets subject to amortization during the nine months ended September 30, 2019 and 2018.

NOTE 7 – EQUITY-METHOD INVESTMENT

In 2013, the Company and Eastman Chemical Company (formerly Taminco Corporation) formed a joint venture (66.66% / 33.34% ownership), St. Gabriel CC Company, LLC, to design, develop, and construct an expansion of the Company's St. Gabriel aqueous choline chloride plant. The Company contributed the St. Gabriel plant, at cost, and all continued expansion and improvements are funded by the owners. The joint venture became operational as of July 1, 2016. St. Gabriel CC Company, LLC is a Variable Interest Entity (VIE) because the total equity at risk is not sufficient to permit the joint venture to finance its own activities without additional subordinated financial support. Additionally, voting rights (2 votes each) are not proportionate to the owners' obligation to absorb expected losses or receive the expected residual returns of the joint venture. The Company will receive up to 2/3 of the production offtake capacity and absorbs operating expenses approximately proportional to the actual percentage of offtake. The joint venture is accounted for under the equity method of accounting since the Company is not the primary beneficiary as the Company does not have the power to direct the activities of the joint venture that most significantly impact its economic performance. The Company recognized a loss of \$84 and \$144 for the three months ended September 30, 2019 and 2018, respectively, and a loss of \$266 and \$424 for the nine months ended September 30, 2019 and 2018, respectively, relating to its portion of the joint venture's expenses in

other expense. The carrying value of the joint venture at September 30, 2019 and December 31, 2018 is \$4,636 and \$4,902, respectively, and is recorded in other assets.

NOTE 8 – REVOLVING LOAN

On June 27, 2018, the Company and a bank syndicate entered into a five year senior secured revolving credit agreement ("Credit Agreement"), which replaced the existing credit facility that had provided for a senior secured term loan of \$350,000 and a revolving loan of \$100,000. The Credit Agreement, which expires on June 27, 2023, provides for revolving loans up to \$500,000 (collectively referred to as the "loans"). The loans may be used for working capital, letters of credit, and other corporate purposes and may be drawn upon at the Company's discretion. The initial proceeds from the Credit Agreement were used to repay the outstanding balance of \$210,750 on its senior secured term loan, which was due May 2019. On May 23, 2019, the Company drew down an additional \$108,569 to fund the Chemogas acquisition (see Note 2, "Significant Acquisitions and Divestitures"). In connection with these additional borrowings, the Company entered into an interest rate swap to protect against adverse fluctuations in interest rates (see Note 20, "Derivative Instruments and Hedging Activities"). As of September 30, 2019, the total balance outstanding on the Credit Agreement amounted to \$218,569. There are no installment payments required on the revolving loans; they may be voluntarily prepaid in whole or in part without premium or penalty, and all outstanding amounts are due on the maturity date.

Amounts outstanding under the Credit Agreement are subject to an interest rate equal to a fluctuating rate as defined by the Credit Agreement plus an applicable rate. The applicable rate is based upon the Company's consolidated net leverage ratio, as defined in the Credit Agreement, and the interest rate was 3.179% at September 30, 2019. The Company is also required to pay a commitment fee on the unused portion of the revolving loan, which is based on the Company's consolidated net leverage ratio as defined in the Credit Agreement and ranges from 0.15% to 0.275% (0.175% at September 30, 2019). The unused portion of the revolving loan amounted to \$281,431 at September 30, 2019. The Company is also required to pay, as applicable, letter of credit fees, administrative agent fees, and other fees to the arrangers and lenders.

Costs associated with the issuance of the revolving loans are capitalized and amortized on a straight-line basis over the term of the Credit Agreement. Costs associated with the issuance of the extinguished debt instrument were capitalized and amortized over the term of the respective financing arrangement using the effective interest method. Capitalized costs net of accumulated amortization totaled \$1,056 and \$1,268 at September 30, 2019 and December 31, 2018, respectively, and are included in other assets on the condensed consolidated balance sheets. Amortization expense pertaining to these costs totaled \$70 for both the three months ended September 30, 2019 and 2018, and \$212 and \$610 for the nine months ended September 30, 2019 and 2018, respectively, and is included in interest expense in the accompanying condensed consolidated statements of earnings.

The Credit Agreement contains quarterly covenants requiring the consolidated leverage ratio to be less than a certain maximum ratio and the consolidated interest coverage ratio to exceed a certain minimum ratio. At September 30, 2019, the Company was in compliance with these covenants. Indebtedness under the Company's loan agreements are secured by assets of the Company.

NOTE 9 – NET EARNINGS PER SHARE

The following presents a reconciliation of the net earnings and shares used in calculating basic and diluted net earnings per share:

	Three Months Ended September 30,						iths Ended aber 30,			
		2019	2018		2019			2018		
Net Earnings - Basic and Diluted	\$	20,676	\$	19,214		59,288	\$	58,239		
Share (000s)										
Weighted Average Common Shares - Basic		32,094		32,141		32,164		32,068		
Effect of Dilutive Securities – Stock Options, Restricted Stock, and Performance Shares		361		424		350		384		
Weighted Average Common Shares - Diluted		32,455		32,565		32,514		32,452		
Net Earnings Per Share - Basic	\$	0.64	\$	0.60	\$	1.84	\$	1.82		
Net Earnings Per Share - Diluted	\$	0.64	\$	0.59	\$	1.82	\$	1.79		

The Company had 183,822 and 0 stock options outstanding at September 30, 2019 and 2018, respectively, that could potentially dilute basic earnings per share in future periods that were not included in diluted earnings per share because their effect on the period presented was anti-dilutive.

NOTE 10 – INCOME TAXES

The Company's effective tax rate for the three months ended September 30, 2019 and 2018, was 15.4% and 18.3%, respectively, and 20.0% and 21.1% for the nine months ended September 30, 2019 and 2018, respectively. The decreases in the effective tax rate for the three and nine months ended September 30, 2019 compared to the three and nine months ended September 30, 2018 were attributable to discrete items.

Balchem will continue to evaluate and analyze the impact of the U.S. Tax Cuts and Jobs Act that was enacted on December 22, 2017 and the additional guidance that has been issued, and may be issued, by the U.S. Department of Treasury, the Securities and Exchange Commission, or the Financial Accounting Standards Board regarding this act.

Income taxes are accounted for under the asset and liability method. Deferred tax assets and liabilities are recognized for the future tax consequences attributable to differences between the financial statement carrying amounts of existing assets and liabilities and their respective tax bases and operating loss and tax credit carryforwards. Deferred tax assets and liabilities are measured using enacted tax rates expected to apply to taxable income in the years in which those temporary differences are expected to be recovered or settled. The effect on deferred tax assets and liabilities of a change in tax rates is recognized in income in the period that includes the enactment date. The Company regularly reviews its deferred tax assets for recoverability and would establish a valuation allowance if it believed that such assets may not be recovered, taking into consideration historical operating results, expectations of future earnings, changes in its operations and the expected timing of the reversals of existing temporary differences.

The Company accounts for uncertainty in income taxes utilizing ASC 740-10, "Income Taxes". ASC 740-10 clarifies whether or not to recognize assets or liabilities for tax positions taken that may be challenged by a tax authority. It prescribes a recognition threshold and measurement attribute for financial statement disclosure of tax positions taken or expected to be taken. This interpretation also provides guidance on derecognition, classification, interest and penalties, accounting in interim periods, and disclosures. The application of ASC 740-10 requires judgment related to the uncertainty in income taxes and could impact our effective tax rate.

The Company files income tax returns in the U.S. and in various states and foreign countries. As of September 30, 2019, in the major jurisdictions where the Company operates, it is generally no longer subject to income tax examinations by tax authorities for years before 2015. As of September 30, 2019 and December 31, 2018, the Company had approximately \$5,525 and \$5,709, respectively, of unrecognized tax benefits, which are included in other long-term obligations on the Company's condensed consolidated balance sheets. The Company includes interest expense or income as well as potential penalties on unrecognized tax positions as a component of income tax expense in the condensed consolidated statements of earnings. The total amount of accrued interest and penalties related to uncertain tax positions at September 30, 2019 and December 31, 2018 was approximately \$1,883 and \$1,839, respectively, and is included in other long-term obligations.

NOTE 11 – SEGMENT INFORMATION

Human Nutrition & Health

The Company's Human Nutrition & Health ("HNH") segment provides human grade choline nutrients and mineral amino acid chelated products through this segment for wellness applications. Choline is recognized to play a key role in the development and structural integrity of brain cell membranes in infants, processing dietary fat, reproductive development and neural functions, such as memory and muscle function. The Company's mineral amino acid chelates, specialized mineral salts, and mineral complexes are used as raw materials for inclusion in premier human nutrition products. Proprietary technology has been combined to create an organic molecule in a form the body can readily assimilate. Sales growth for human nutrition applications is reliant on differentiation from lower-cost competitive products through scientific data, intellectual property and customer perceptions of brand value. Consequently, the Company makes investments in such activities for long-term value differentiation. This segment also serves the food and beverage industry for beverage, bakery, dairy, confectionary, and savory manufacturers. The Company partners with our customers from ideation through commercialization to bring on-trend beverages, baked goods, confections, dairy and meat products to market. The Company's expertise in trends analysis and product development, combined with manufacturing capabilities in customized spray dried and emulsified powders, blended lipid systems, liquid flavor delivery systems, juice and dairy bases, chocolate systems, as well as ice cream bases and variegates makes the Company a one-stop solutions provider for beverage and dairy product development needs. Additionally, this segment provides microencapsulation solutions to a variety of applications in food, pharmaceutical and nutritional ingredients to enhance performance of nutritional fortification, processing, mixing, and packaging applications and shelf-life. Major product applications are baked goods, refrigerated and frozen dough systems, processed meats,

seasoning blends, confections, and nutritional supplements. The Company also creates cereal systems for ready-to-eat cereals, grain-based snacks, and cereal based ingredients.

Animal Nutrition & Health

The Company's Animal Nutrition & Health ("ANH") segment provides nutritional products derived from its microencapsulation and chelation technologies in addition to basic choline chloride. For ruminant animals, the Company's microencapsulated products boost health and milk production, delivering nutrient supplements that are biologically available, providing required nutritional levels. The Company's proprietary chelation technology provides enhanced nutrient absorption for various species of production and companion animals and is marketed for use in animal feed throughout the world. ANH also manufactures and supplies choline chloride, an essential nutrient for monogastric animal health, predominantly to the poultry, pet and swine industries. Choline, which is manufactured and sold in both dry and aqueous forms, plays a vital role in the metabolism of fat. In poultry, choline deficiency can result in reduced growth rates and perosis in young birds, while in swine production choline is a necessary and required component of gestating and lactating sow diets for both liver health and prevention of leg deformity.

Sales of value-added encapsulated products are highly dependent on overall industry economics as well as the Company's ability to leverage the results of university and field research on the animal health and production benefits of our products. Management believes that success in the commodity-oriented basic choline chloride marketplace is highly dependent on the Company's ability to maintain its strong reputation for excellent product quality and customer service. The Company continues to drive production efficiencies in order to maintain its competitive-cost position to effectively compete in a competitive global marketplace.

Specialty Products

Ethylene oxide, at the 100% level and blended with carbon dioxide, is sold as a sterilant gas, primarily for use in the health care industry. It is used to sterilize a wide range of medical devices because of its versatility and effectiveness in treating hard or soft surfaces, composites, metals, tubing and different types of plastics without negatively impacting the performance of the device being sterilized. The Company's 100% ethylene oxide product and blends are distributed worldwide in specially designed, reusable and recyclable drum and cylinder packaging, to assure compliance with safety, quality and environmental standards as outlined by the applicable regulatory agencies in the countries our products are shipped to. The Company's inventory of these specially built drums and cylinders, along with its four filling facilities, represents a significant capital investment. Contract sterilizers and medical device manufacturers are principal customers for this product. The Company also sells single use canisters with 100% ethylene oxide for use in sterilizing re-usable devices typically processed in autoclave units in hospitals. As a fumigant, ethylene oxide blends are highly effective in killing bacteria, fungi, and insects in spices and other seasoning materials.

The Company also distributes a number of other gases for various uses, most notably propylene oxide and ammonia. Propylene oxide is marketed and sold in the U.S. as a fumigant to aid in the control of insects and microbiological spoilage; and to reduce bacterial and mold contamination in certain shell and processed nut meats, processed spices, cacao beans, cocoa powder, raisins, figs and prunes. The Company distributes its propylene oxide product in the U.S. primarily in recyclable, single-walled, carbon steel cylinders according to standards outlined by the EPA and the DOT. Propylene oxide is also sold worldwide to customers in approved reusable and recyclable drum and cylinder packaging for various chemical synthesis applications, such as increasing paint durability and manufacturing specialty starches and textile coatings. Ammonia is used primarily as a refrigerant, and also for heat treatment of metals and various chemical synthesis applications, and is distributed in reusable and recyclable drum and cylinder drum and cylinder packaging approved for use in the countries these products are shipped to. The Company's inventory of cylinders for these products also represents a significant capital investment.

The Company's micronutrient agricultural nutrition business sells chelated minerals primarily into high value crops. The Company has a unique and patented two-step approach to solving mineral deficiency in plants to optimize health, yield and shelf-life. First, the Company determines optimal mineral balance for plant health. The Company then has a foliar applied Metalosate product range, utilizing patented amino acid chelate technology. Its products quickly and efficiently deliver mineral nutrients. As a result, the farmer/grower gets healthier crops that are more resistant to disease and pests, larger yields and healthier food for the consumer with extended shelf life for produce being shipped long distances.

Industrial Products

Certain derivatives of choline chloride are manufactured and sold into industrial applications predominately as a component for hydraulic fracturing of shale natural gas wells. The Company's products offer an attractive, effective and more environmentally responsible alternative than other clay stabilizers. Industrial grade choline bicarbonate is completely chloride free and the Company's choline chloride reduces the amount of chlorides released into the environment up to 75% when compared to potassium chloride. The Industrial Products segment also includes the manufacture and sale of methylamines. Methylamines are a primary building block for the manufacture of choline products and are produced at its Italian operation and sold for a wide range of industrial applications in Europe.

The segment information is summarized as follows:

Business Segment Assets

	Sep	otember 30, 2019	De	ecember 31, 2018
Human Nutrition & Health	\$	692,558	\$	702,692
Animal Nutrition & Health		136,680		136,810
Specialty Products		182,002		59,558
Industrial Products		15,590		22,822
Other Unallocated (1)		69,798		59,473
Total	\$	1,096,628	\$	981,355

⁽¹⁾ Other unallocated assets consist of certain cash, capitalized loan issuance costs, other assets, investments, and deferred income taxes, which the Company does not allocate to its individual business segments.

Business Segment Net Sales

	Three Months Ended September 30,				Nine Months Ended September 30,			
		2019	2018		2019			2018
Human Nutrition & Health	\$	86,142	\$	85,890	\$	257,163	\$	253,966
Animal Nutrition & Health		42,286		40,410		129,127		128,587
Specialty Products		24,888		17,629		68,219		58,233
Industrial Products		5,279		11,114		22,669		39,354
Total	\$	158,595	\$	155,043	\$	477,178	\$	480,140

Business Segment Earnings Before Income Taxes

	Three Months Ended September 30,					Nine Mon Septem	 	
		2019	2018		2019		2018	
Human Nutrition & Health	\$	13,193	\$	13,107	\$	39,234	\$ 35,724	
Animal Nutrition & Health		6,122		5,100		16,423	19,607	
Specialty Products		6,699		5,767		22,275	19,476	
Industrial Products		842		1,751		3,390	6,843	
Transaction and integration costs, ERP implementation costs, and unallocated legal fees (2)		(688)		(202)		(2,253)	(1,784)	
Unallocated amortization expense (3)		(138)		_		(157)	_	
Interest and other (expense) (4)		(1,594)		(1,994)		(4,802)	(6,099)	
Total	\$	24,436	\$	23,529	\$	74,110	\$ 73,767	

⁽²⁾ Transaction and integration costs and unallocated legal fees for the three and nine month ended September 30, 2019 and 2018, respectively, were primarily related to acquisitions. ERP implementation costs for the three and nine months ended September 30, 2019 and 2018 were related to a project in connection with a company-wide ERP system implementation.

⁽³⁾ Unallocated amortization expense for the three and nine months ended September 30, 2019 was related to amortization of an intangible asset in connection with a company-wide ERP system implementation.

⁽⁴⁾ Interest and other (expense) for the three and nine months ended September 30, 2019 and 2018 included amortization expense related to capitalized loan issuance costs.

Depreciation/Amortization

	Three Months Ended September 30,			Nine Months Ended September 30,				
		2019	2018		2018 2019			2018
Human Nutrition & Health	\$	7,411	\$	8,372	\$	22,880	\$	25,288
Animal Nutrition & Health		1,646		1,397		4,847		3,996
Specialty Products		2,372		1,019		4,983		3,039
Industrial Products		116		176		406		527
Unallocated amortization expense (5)	\$	138	\$	_	\$	157	\$	_
Amortization expense related to deferred financing cost (6)	\$	70	\$	70	\$	212	\$	610
Total	\$	11,753	\$	11,034	\$	33,485	\$	33,460

⁽⁵⁾ Unallocated amortization expense for the three and nine months ended September 30, 2019 was related to amortization of an intangible asset in connection with a company-wide ERP system implementation.

Capital Expenditures

	Nine Mon Septem	
	 2019	2018
Human Nutrition & Health	\$ 14,136	\$ 6,041
Animal Nutrition & Health	2,788	3,002
Specialty Products	2,050	1,376
Industrial Products	583	909
Total	\$ 19,557	\$ 11,328

NOTE 12 – REVENUE

Revenue Recognition

Revenues are recognized when control of the promised goods is transferred to customers, in an amount that reflects the consideration the Company expects to realize in exchange for those goods.

The following table presents revenues disaggregated by revenue source. Sales and usage-based taxes are excluded from revenues.

	Three Months Ended September 30,				Nine Months Ended September 30,			
		2019	2018		2018 2019		2018	
Product Sales	\$	149,862	\$	145,637	\$	449,878	\$	451,087
Co-manufacturing		5,911		6,629		19,112		19,682
Bill and Hold		1,056		1,336		3,182		4,180
Consignment		688		424		1,770		1,802
Product Sales Revenue		157,517		154,026		473,942		476,751
Royalty Revenue		1,078		1,017		3,236		3,389
Total Revenue	\$	158,595	\$	155,043	\$	477,178	\$	480,140

⁽⁶⁾ Amortization expense related to capitalized loan issuance costs was included in interest and other (expense) in Company's condensed consolidated statement of earnings.

The following table presents revenues disaggregated by geography, based on the shipping addresses of customers:

	Three Months Ended September 30,				Nine Mon Septem	ths Ended iber 30,		
	2019		2018		2019		2018	
United States	\$	112,811	\$	115,155	\$	353,111	\$	360,842
Foreign Countries		45,784		39,888		124,067		119,298
Total Revenue	\$	158,595	\$	155,043	\$	477,178	\$	480,140

Product Sales Revenues

The Company's primary operation is the manufacturing and sale of health and wellness ingredient products, in which the Company receives an order from a customer and fulfills that order. The Company's product sales are considered point-in-time revenue and consist of four sub-streams: product sales, co-manufacturing, bill and hold, and consignment.

Under the co-manufacturing agreements, the Company is responsible for the manufacture of a finished good where the customer provides the majority of the raw materials. The Company controls the manufacturing process and the ultimate end-product before it is shipped to the customer. Based on these factors, the Company has determined that it is the principal in these agreements and therefore revenue is recognized in the gross amount of consideration the Company expects to be entitled for the goods provided.

Royalty Revenues

Royalty revenue consists of agreements with customers to use the Company's intellectual property in exchange for a sales-based royalty. Royalties are considered over time revenue and are recorded in the Human Nutrition & Health segment.

Contract Liabilities

The Company records contract liabilities when cash payments are received or due in advance of performance, including amounts which are refundable.

The Company's payment terms vary by the type and location of customers and the products offered. The term between invoicing and when payment is due is not significant. For certain products or services and customer types, the Company requires payment before the products are delivered to the customer.

Practical Expedients and Exemptions

The Company generally expenses sales commissions when incurred because the amortization period would have been one year or less. These costs are recorded within selling and marketing expenses.

The Company does not disclose the value of unsatisfied performance obligations for (i) contracts with an original expected length of one year or less and (ii) contracts for which the Company recognizes revenue at the amount to which it has the right to invoice for products shipped.

NOTE 13 – SUPPLEMENTAL CASH FLOW INFORMATION

Cash paid during the nine months ended September 30, 2019 and 2018 for income taxes and interest is as follows:

		Nine Months Ended September 30, 2019 2018					
	_	2019		2018			
Income taxes	· · · · · · · · · · · · · · · · · · ·	\$ 18,226	\$	17,781			
Interest		\$ 4,567	\$	5,345			

NOTE 14 – ACCUMULATED OTHER COMPREHENSIVE INCOME (LOSS)

The changes in accumulated other comprehensive income/(loss) were as follows:

	Three Mor Septem			Nine Months Ended September 30,			
	2019	2018		2019		2018	
Net foreign currency translation adjustment	\$ (2,209)	\$ (545	\$	(3,513)	\$	(2,093)	
Net change of cash flow hedge (see Note 20 for further information)							
Unrealized loss on cash flow hedge	(769)	_	-	(2,475)		_	
Tax	112	_	-	519		_	
Net of tax	(657)			(1,956)			
Net change in postretirement benefit plan (see Note 15 for further information)							
Amortization of prior service cost	19	17		55		52	
Amortization of gain	(12)		-	(34)		(2)	
Total before tax	7	17		21		50	
Tax	(2)	8)	3)	(5)		(12)	
Net of tax	5	9)	16		38	
Total other comprehensive loss	\$ (2,861)	\$ (536	\$	(5,453)	\$	(2,055)	

Included in "Net foreign currency translation adjustment" were \$4,626 and \$1,715 of gain related to a net investment hedge, respectively, which included taxes of \$456 for both the three and nine months ended September 30, 2019. There were no such activities for the three and nine months ended September 30, 2018. See Note 20, "Derivative Instruments and Hedging Activities."

Accumulated other comprehensive (loss)/income at September 30, 2019 and December 31, 2018 consisted of the following:

	cı tra	Foreign urrency anslation justment	Cash flow hedges	 stretirement enefit plan	Total
Balance December 31, 2018	\$	(4,285)	\$ 	\$ 683	\$ (3,602)
Other comprehensive (loss)/income		(3,513)	(1,956)	16	(5,453)
Balance September 30, 2019	\$	(7,798)	\$ (1,956)	\$ 699	\$ (9,055)

NOTE 15 - EMPLOYEE BENEFIT PLANS

Postretirement Medical Plans

The Company provides postretirement benefits in the form of two unfunded postretirement medical plans; one that is under a collective bargaining agreement and covers eligible retired employees of the Verona facility and a plan for those named as executive officers in the Company's proxy statement.

Net periodic benefit costs for such retirement medical plans were as follows:

	Nine Months Ended September 30,				
	 2019		2018		
Service cost	\$ 47	\$	58		
Interest cost	29		33		
Amortization of prior service cost	55		52		
Amortization of gain	(34)		(2)		
Net periodic benefit cost	\$ 97	\$	141		

The amount recorded for these obligations on the Company's balance sheets as of September 30, 2019 and December 31, 2018 is \$1,250 and \$1,174, respectively, and is included in other long-term obligations. These plans are unfunded and approved claims are paid from Company funds. Historical cash payments made under such plans have typically been less than \$100 per year.

Deferred Compensation Plan

On June 1, 2018, the Company established an unfunded, nonqualified deferred compensation plan maintained for the benefit of a select group of management or highly compensated employees. Assets of the plan are held in a rabbi trust, which are subject to additional risk of loss in the event of bankruptcy or insolvency of the Company. The deferred compensation liability was \$1,803 and \$265 as of September 30, 2019 and December 31, 2018, respectively, and is included in other long-term obligations on the Company's balance sheets. The related rabbi trust assets were \$1,803 and \$265 as of September 30, 2019 and December 31, 2018, respectively, and are included in other non-current assets on the Company's balance sheets.

Defined Benefit Pension Plans

On May 27, 2019, the Company acquired Chemogas, which had two defined benefit pension plans (DB plans), one of which was closed on December 31, 2018 and replaced by four individual defined contribution plans. The active pension plan is funded by means of employee and Company contributions and provides for the payment of a lump sum at retirement or payments in case of death of the covered employees. The DB plan is considered a post-employment benefit. The amount recorded for these obligations on the Company's balance sheet as of September 30, 2019 is \$580 and is included in other long-term obligations.

NOTE 16 – COMMITMENTS AND CONTINGENCIES

Rent expense charged to operations under lease agreements for the three and nine months ended September 30, 2019 aggregated to approximately \$817 and \$2,381, respectively. For the three and nine months ended September 30, 2018, rent expense charged to operations under lease agreements were approximately \$733 and \$2,388, respectively.

Aggregate future minimum rental payments required under all non-cancelable operating leases at September 30, 2019 are as follows:

Year	
October 1, 2019 to December 31, 2019	\$ 900
2020	3,109
2021	2,207
2022	1,749
2023	1,365
2024	1,190
Thereafter	3,750
Total minimum lease payments	\$ 14,270

The Company's Verona, Missouri facility, while held by a prior owner, was designated by the EPA as a Superfund site and placed on the National Priorities List in 1983, because of dioxin contamination on portions of the site. Remediation was conducted by the prior owner under the oversight of the EPA and the Missouri Department of Natural Resources ("MDNR"). While the Company must maintain the integrity of the capped areas in the remediation areas on the site, the prior owner is responsible for completion of any further Superfund remedy. The Company is indemnified by the sellers under its May 2001 asset purchase agreement covering its acquisition of the Verona, Missouri facility for potential liabilities associated with the Superfund site.

From time to time, the Company is a party to various litigation, claims and assessments. Management believes that the ultimate outcome of such matters will not have a material effect on the Company's consolidated financial position, results of operations, or liquidity.

NOTE 17 – FAIR VALUE OF FINANCIAL INSTRUMENTS

The Company has a number of financial instruments, none of which are held for trading purposes. The Company estimates that the fair value of all financial instruments at September 30, 2019 and December 31, 2018 does not differ materially from the aggregate carrying values of its financial instruments recorded in the accompanying condensed consolidated balance sheets. The estimated fair value amounts have been determined by the Company using available market information and appropriate valuation methodologies. Considerable judgment is necessarily required in interpreting market data to develop the estimates of fair value, and, accordingly, the estimates are not necessarily indicative of the amounts that the Company could realize in a current market exchange. The carrying value of debt approximates fair value as the interest rate is based on market and the Company's consolidated leverage ratio. The Company's financial instruments also include cash equivalents, accounts receivable, accounts payable, and accrued liabilities, which are carried at cost and approximate fair value due to the short-term maturity of these instruments. Cash and cash equivalents at September 30, 2019 and December 31, 2018 includes \$804 and \$793 in money market funds, respectively.

Non-current assets at September 30, 2019 and December 31, 2018 includes \$1,803 and \$265, respectively, of rabbi trust funds related to the Company's deferred compensation plan. The money market and rabbi trust funds are valued using level one inputs, as defined by ASC 820, "Fair Value Measurement."

The Company also has derivative financial instruments, consisting of a cross-currency swap and an interest rate swap, which are included in derivative assets and derivative liabilities, respectively, in the condensed consolidated balance sheets (see Note 20, "Derivative Instruments and Hedging Activities"). The fair values of these derivative instruments are determined based on Level 2 inputs, using significant inputs that are observable either directly or indirectly, including interest rate curves and implied volatilities.

NOTE 18 – RELATED PARTY TRANSACTIONS

The Company provides services on a contractual agreement to St. Gabriel CC Company, LLC. These services include accounting, information technology, quality control, and purchasing services, as well as operation of the St. Gabriel CC Company, LLC plant. The Company also sells raw materials to St. Gabriel CC Company, LLC. These raw materials are used in the production of finished goods that are, in turn, sold by Saint Gabriel CC Company, LLC to the Company for resale to unrelated parties. As such, the sale of these raw materials to St. Gabriel CC Company, LLC in this scenario lacks economic substance and therefore the Company does not include them in net sales within the condensed consolidated statements of earnings.

The services the Company provided amounted to \$955 and \$839, respectively, for the three months ended September 30, 2019 and 2018 and \$2,849, respectively, for the nine months ended September 30, 2019 and 2018. The raw materials purchased and subsequently sold amounted to \$5,893 and \$7,111, respectively, for the three months ended September 30, 2019 and 2018 and \$19,039 and \$22,840, respectively, for the nine months ended September 30, 2019 and 2018. These services and raw materials are primarily recorded in cost of goods sold net of the finished goods received from St. Gabriel CC Company, LLC of \$4,538 and \$5,127, respectively, for the three months ended September 30, 2019 and 2018 and \$14,308 and \$16,751, respectively, for the nine months ended September 30, 2019 and 2018 and December 31, 2018, the Company had receivables of \$2,109 and \$3,210, respectively, recorded in accounts receivable from St. Gabriel CC Company, LLC for services rendered and raw materials sold and payables of \$1,420 and \$1,943, respectively, for finished goods received recorded in accrued expenses. The Company had payables in the amount of \$296 and \$314, respectively, related to non-contractual monies owed to St. Gabriel CC Company, LLC, recorded in accrued expenses as of September 30, 2019 and December 31, 2018, respectively. In addition, the Company had a receivable in the amount of \$98 related to non-contractual monies owed from St. Gabriel CC Company, LLC, recorded in receivables as of September 30, 2019.

NOTE 19 – LEASES

The Company has both real estate leases and equipment leases. The main types of equipment leases include forklifts, trailers, printers and copiers, railcars, and trucks. All leases are categorized as operating leases. As a result of electing the practical expedient within ASU 2016-02, variable lease payments are combined and recognized on the balance sheet in the event that those charges and any

related increases are explicitly stated in the lease. Such payments include common area maintenance charges, property taxes, and insurance charges and are recorded in the ROU asset and corresponding liability when the payments are stated in the lease with (a) fixed or in-substance fixed amounts, or (b) a variable payment based on an index or rate. Due to the acquisitive nature of the Company and the potential for synergies upon integration of acquired entities, the Company determined that the reasonably certain criterion could not be met for any renewal periods beginning two years beyond the implementation date, which is January 1, 2019. In addition, the Company has historically not been exercising purchase options with equipment leases as it does not make economic sense to buy the equipment. Instead, the Company has historically replaced the equipment with a new lease. Therefore, the Company determined that the reasonably certain criterion could not be met as it relates to purchase options. The Company has no residual value guarantees in lease transactions.

The Company did not identify any embedded leases. As indicated above, the Company elected the practical expedient to combine lease and non-lease components and recognizes the combined amount on the condensed consolidated balance sheet.

Management determined that since the Company has a centralized treasury function, the parent company would either fund or guarantee a subsidiary's loan for borrowing over a similar term. As such, the Company's management determined it is appropriate to utilize a corporate based borrowing rate for all locations. The Company developed four tranches of leases based on lease terms and these tranches reflect the composition of the current lease portfolio. The Company's borrowing history shows that interest rates of a term loan or a line of credit depend on the duration of the loan rather than the nature of the assets purchased by those funds. Based on this understanding, the Company elected to use a portfolio approach to discount rates, applying corporate rates to the tranches of leases based on lease terms. Based on the Company's risk rating, the company applied the following discount rates upon implementation: (1) 1-2 years, 3.45% (2) 3-4 years, 4.04% (3) 5-9 years, 4.38% and (4) 10+ years, 5.10%.

For the three and nine months ended September 30, 2019, the Company's total lease cost is as follows, which includes both amounts recognized in profits or losses during the period and amounts capitalized on the balance sheet, and the cash flows arising from lease transactions:

	Septer	onths Ended nber 30,	Sept	onths Ended ember 30, 2019
Lease Cost				
Operating lease cost	\$	817	\$	2,381
Other information				
(Gains) and losses on sale and leaseback transactions, net		_		_
Cash paid for amounts included in the measurement of lease liabilities				
Operating cash flows from operating leases		823		2,395
Right-of-use assets obtained in exchange for new operating lease liabilities, net of right-of-use assets sold		(240)		8,485
Weighted-average remaining lease term - operating leases		4.97 years		4.97 years
Weighted-average discount rate - operating		4.6%		4.6%

NOTE 20 – DERIVATIVE INSTRUMENTS AND HEDGING ACTIVITIES

The Company is exposed to market fluctuations in interest rates as well as variability in foreign exchange rates. In May 2019, the Company entered into an interest rate swap with JP Morgan Chase, N.A. (the Swap CounterParty) and a cross-currency swap with JP Morgan Chase, N.A. (the Bank Counterparty). The Company's primary objective for holding derivative financial instruments is to manage the interest rate risk and foreign currency risk.

On May 28, 2019, the Company entered into a pay-fixed, receive-floating interest rate swap with a notional amount of \$108,569 and a maturity date of June 27, 2023. The Company's risk management objective and strategy with respect to the interest rate swap is to protect the Company against adverse fluctuations in interest rates by reducing its exposure to variability in cash flows relating to interest payments on a portion of its outstanding debt. The Company is meeting its objective since changes in the cash flows of the interest rate swap are expected to exactly offset the changes in the cash flows attributable to fluctuations in the contractually specified interest rate on the interest payments associated with the Company's credit facility with JP Morgan Chase., N.A. The net interest income related to the interest rate swap contract was \$60 and \$94 for the three and nine months ended September 30, 2019, respectively, which were recorded in the condensed consolidated statements of operations under interest expense, net.

At the same time, the Company also entered into a cross-currency swap to manage foreign exchange risk related to the Company's net investment in Chemogas. The derivative has a notional amount of \$108,569, an effective date of May 28, 2019, and a maturity date of June 27, 2023.

As of September 30, 2019, the fair value of derivative instruments are shown as follows in the Company's condensed consolidated balance sheet:

	Balance Sheet Location	September 30, 2	2019
Derivative assets:			
Cross-currency swap	Derivative assets	\$	2,171
Derivative liabilities:			
Interest rate swap	Derivative liabilities	\$	2,475

On a quarterly basis, the Company assesses whether the hedging relationship related to the interest rate swap is highly effective at achieving offsetting changes in cash flow attributable to the risk being hedged based on the following factors: (1) the key features and terms as enumerated above for the interest rate swap and hedged transactions match during the period (2) it is probable that the Swap Counterparty will not default on its obligations under the swap, and (3) the Company performs a qualitative review each quarter to assess whether the relationship qualifies for hedge accounting. If any mismatches arise, the portion of gains and losses related to ineffectiveness of the hedging relationship is recognized in earnings during the reporting period.

In addition, on a quarterly basis the Company assesses whether the hedging relationship related to the cross-currency swap is highly effective based on the following evaluations: (1) the Company will always have a sufficient amount of non-functional currency (EUR) net investment balance to at least meet the cross-currency notional until the maturity date of the hedge (2) it is probable that JP Morgan Chase, N.A., the swap Counterparty, will not default on its obligations under the swap, and (3) the Company performs a qualitative review each quarter to assess whether the relationship qualifies for hedge accounting. If any mismatches arise, the portion of gains and losses related to ineffectiveness of the hedging relationship is recognized in earnings during the reporting period.

As of September 30, 2019, the Company assessed the hedging relationships for the interest rate swap and cross-currency swap and determined them to be highly effective. As such, the net change in fair values of the derivative instruments was recorded in accumulated other comprehensive income, where the associated gains and losses will remain until such time that the derivative instruments are matured and settled on June 27, 2023.

Losses and gains on our hedging instruments are recognized in accumulated other comprehensive income (loss) and categorized as follows for the three and nine months ended September 30, 2019:

	Location within Statements of Comprehensive Income	Three Months Ended September 30, 2019		 e Months Ended September 30, 2019
Cash flow hedge (interest rate swap), net of tax	Unrealized loss on cash flow hedge, net	\$	(657)	\$ (1,956)
Net investment hedge (cross- currency swap), net of tax	Net foreign currency translation adjustment		4,626	1,715
		\$	3,969	\$ (241)

There was no hedging activity for the three and nine months ended September 30, 2018.

Item 2. Management's Discussion and Analysis of Financial Condition and Results of Operations (All amounts in thousands, except share and per share data)

This report contains forward-looking statements, within the meaning of Section 21E of the Exchange Act, which reflect our expectation or belief concerning future events that involve risks and uncertainties. Actions and performance could differ materially from what is contemplated by the forward-looking statements contained in this report. Factors that might cause differences from the forward-looking statements include those referred to or identified in Item 1A of the Annual Report on Form 10-K for the year ended December 31, 2018 and other factors that may be identified elsewhere in this report. Reference should be made to such factors and all forward-looking statements are qualified in their entirety by the above cautionary statements.

Overview

We develop, manufacture, distribute and market specialty performance ingredients and products for the nutritional, food, pharmaceutical, animal health, medical device sterilization, plant nutrition and industrial markets. Our four reportable segments are strategic businesses that offer products and services to different markets: Human Nutrition & Health, Animal Nutrition & Health, Specialty Products, and Industrial Products, as more fully described in Note 11 of the condensed consolidated financial statements.

We sell products for all four segments through our own sales force, independent distributors, and sales agents.

The following tables summarize consolidated net sales by segment and business segment earnings from operations for the three and nine months ended September 30, 2019 and 2018:

Business Segment Net Sales:

	Three Months Ended September 30,			Nine Months Ended September 30,				
		2019		2018		2019		2018
Human Nutrition & Health	\$	86,142	\$	85,890	\$	257,163	\$	253,966
Animal Nutrition & Health		42,286		40,410		129,127		128,587
Specialty Products		24,888		17,629		68,219		58,233
Industrial Products		5,279		11,114		22,669		39,354
Total	\$	158,595	\$	155,043	\$	477,178	\$	480,140

Business Segment Earnings From Operations:

Three Months Ended September 30,			Nine Months Ended September 30,				
	2019		2018		2019		2018
\$	13,193	\$	13,107	\$	39,234	\$	35,724
	6,122		5,100		16,423		19,607
	6,699		5,767		22,275		19,476
	842		1,751		3,390		6,843
	(688)		(202)		(2,253)		(1,784)
	(138)				(157)		
\$	26,030	\$	25,523	\$	78,912	\$	79,866
		Septem 2019 \$ 13,193 6,122 6,699 842 (688) (138)	September 3 2019 \$ 13,193 \$ 6,122 6,699 842 (688) (138)	September 30, 2019 2018 \$ 13,193 \$ 13,107 6,122 5,100 6,699 5,767 842 1,751 (688) (202) (138) —	September 30, 2019 2018 \$ 13,193 \$ 13,107 6,122 5,100 6,699 5,767 842 1,751 (688) (202) (138) —	September 30, Septem 2019 2019 2018 2019 \$ 13,193 \$ 13,107 \$ 39,234 6,122 5,100 16,423 6,699 5,767 22,275 842 1,751 3,390 (688) (202) (2,253) (138) — (157)	September 30, September 2019 2018 2019 \$ 13,193 \$ 13,107 \$ 39,234 \$ 6,122 5,100 16,423 6,699 5,767 22,275 842 1,751 3,390 (688) (202) (2,253) (138) — (157)

Acquisition of Chemogas Holding NV

On May 27, 2019, we acquired 100 percent of the outstanding common shares of Chemogas, a privately held specialty gases company headquartered in Grimbergen, Belgium. We made payments of approximately \in 99,503 (translated to \$111,324) on the acquisition date, amounting to approximately \in 88,579 (translated to \$99,102) to the former shareholders and approximately \in 10,924 (translated to \$12,222) to Chemogas' lender to pay off all Chemogas bank debt. Considering the cash acquired of \in 3,943 (translated to \$4,412), net payments made to the former shareholders were \in 84,636 (translated to \$94,690). The acquisition was primarily financed through our Credit Agreement. Chemogas has been a leader in the packaging and distribution of a wide variety of specialty gases, most notably ethylene oxide, primarily in the European and Asian markets, for medical device sterilization. Through its operational and logistical excellence, Chemogas supports its customers' needs across more than 70 countries. With the acquisition, we significantly expand our geographic presence in the packaged ethylene oxide market, enabling us to offer worldwide service and support to its medical device sterilization customers within the Specialty Products segment. The Chemogas sites in Europe and Asia will form a global network of facilities when combined with Balchem's sites in the United States.

RESULTS OF OPERATIONS

(All amounts in thousands, except share and per share data)

Three months ended September 30, 2019 compared to three months ended September 30, 2018.

Net Sales

Net sales for the three months ended September 30, 2019 were \$158,595, as compared with \$155,043 for the three months ended September 30, 2018, an increase of \$3,552 or 2.3%. Net sales for the Human Nutrition & Health segment were \$86,142 for the three months ended September 30, 2019, compared with \$85,890 for the three months ended September 30, 2018, an increase of \$252 or 0.3%. The increase was primarily driven by higher sales within our Human Nutrition & Pharma business, partially offset by lower Cereal Systems volumes. Net sales for the Animal Nutrition & Health segment were \$42,286 for the three months ended September 30, 2019, as compared with \$40,410 for the three months ended September 30, 2018, an increase of \$1,876 or 4.6%. The increase was primarily the result of higher sales of ruminant animal feed market products. Net sales for the Specialty Products segment were \$24,888 for the three months ended September 30, 2019, as compared with \$17,629 for the three months ended September 30, 2018, an increase of \$7,259 or 41.2%. The increase was primarily due to higher ethylene oxide sales into the medical device sterilization market due to both the contribution of Chemogas and higher legacy product sales, partially offset by lower volumes in the plant nutrition business. Net sales for the Industrial Products segment were \$5,279 for the three months ended September 30, 2019 as compared to \$11,114 for the three months ended September 30, 2018, a decrease of \$5,835 or 52.5%. The decrease is principally due to lower sales volumes of various choline and choline derivatives used in shale fracking applications.

Gross Margin

For the three months ended September 30, 2019, gross margin increased to \$54,008 compared to \$48,002 for the three months ended September 30, 2018, an increase of \$6,006 or 12.5%. Gross margin as a percentage of sales for the three months ended September 30, 2019 increased to 34.1% from 31.0% in the prior year comparative period. Gross margin percentage for the Human Nutrition & Health segment increased 2.5% for the three months ended September 30, 2019 as compared to the three months ended September 30, 2018 primarily due to mix, certain lower raw material costs and manufacturing efficiencies. Gross margin percentage increased for Animal Nutrition & Health by 2.8% primarily due to mix, certain lower raw material costs, and manufacturing efficiencies, partially offset by lower margins in the European monogastric business. Gross margin percentage for the Specialty Products decreased 4.9%

compared to the three month period ended September 30, 2018 primarily due to mix. Industrial Products gross margin percentage increased 7.8% from the prior year comparative period, primarily due to certain lower raw material costs and mix.

Operating Expenses

Operating expenses for the three months ended September 30, 2019 were \$27,978 or 17.6% of net sales as compared to \$22,479 or 14.5% of net sales for the three months ended September 30, 2018. The increase was primarily due to the timing of an insurance recovery of \$2,575 received in 2018 and incremental operating expenses related to the Chemogas acquisition of \$2,072.

Earnings from Operations

Principally as a result of the above-noted details, earnings from operations for the three months ended September 30, 2019 were \$26,030 as compared to \$25,523 for the three months ended September 30, 2018, an increase of \$507 or 2.0%. Earnings from operations as a percentage of sales were 16.4% and 16.5% for the three months ended September 30, 2019 and 2018, respectively. Earnings from the Human Nutrition & Health segment were \$13,193, an increase of \$86 or 0.7%, primarily due to the aforementioned higher sales and mix, partially offset by higher operating expenses resulting from the prior year benefiting from the timing of an insurance recovery. Animal Nutrition & Health segment earnings from operations were \$6,122, a increase of \$1,022 or 20.0%, primarily the result of the aforementioned higher sales of products targeted for ruminant animal feed markets and certain lower raw material costs, partially offset by lower margins in the European monogastric business as a result of increased competitive activity. Earnings from operations from the Specialty Products segment were \$6,699, an increase of \$932 or 16.2%, primarily due to the aforementioned higher sales, partially offset by mix and higher operating expenses due to the acquisition of Chemogas. Earnings from operations from the Industrial Products segment of \$842 for the three months ended September 30, 2019 decreased \$909 compared to the three months ended September 30, 2018, primarily due to the aforementioned lower sales volumes.

Other Expenses (Income)

Interest expense for the three months ended September 30, 2019 and 2018 was \$1,672 and \$1,797, respectively, which is primarily related to outstanding borrowings under the Credit Agreement. Other income was \$78 for the three months ended September 30, 2019 and other expense was \$197 for the three months ended September 30, 2018.

Income Tax Expense

Our effective tax rate for the three months ended September 30, 2019 and 2018, was 15.4% and 18.3%, respectively. The decrease was attributable to discrete items.

Net Earnings

Principally as a result of the above-noted details, net earnings for the three months ended September 30, 2019 were \$20,676 as compared with \$19,214 for the three months ended September 30, 2018, an increase of \$1,462 or 7.6%.

Nine months ended September 30, 2019 compared to nine months ended September 30, 2018.

Net Sales

Net sales for the nine months ended September 30, 2019 were \$477,178, as compared with \$480,140 for the nine months ended September 30, 2018, a decrease of \$2,962 or 0.6%. Net sales for the Human Nutrition & Health segment were \$257,163 for the nine months ended September 30, 2019, compared with \$253,966 for the nine months ended September 30, 2018, an increase of \$3,197 or 1.3%. Sales within our Ingredient Solutions business into food and beverage markets were up \$2,353 or 1.3% compared to the nine months ended September 30, 2018. Net sales for the Animal Nutrition & Health segment were \$129,127 for the nine months ended September 30, 2019, as compared with \$128,587 for the nine months ended September 30, 2018, an increase of \$540 or 0.4%. The increase was primarily the result of higher sales of ruminant animal feed market products. Net sales for the Specialty Products segment were \$68,219 for the nine months ended September 30, 2019, as compared with \$58,233 for the nine months ended September 30, 2018, an increase of \$9,986 or 17.1%. The increase was primarily due to higher ethylene oxide sales into the medical device sterilization market due to both the contribution of Chemogas and higher legacy product sales, partially offset by lower volumes in the plant nutrition business. Net sales for the Industrial Products segment were \$22,669 for the nine months ended September 30, 2019 as compared to \$39,354 for the nine months ended September 30, 2018, a decrease of \$16,685 or 42.4%. The decrease is principally due to lower sales volumes of various choline and choline derivatives used in shale fracking applications.

Gross Margin

For the nine months ended September 30, 2019, gross margin increased to \$157,021 compared to \$152,927 for the nine months ended September 30, 2018, an increase of \$4,094 or 2.7%. Gross margin as a percentage of sales was 32.9% and 31.9% for the nine months ended September 30, 2019 and September 30, 2018. Gross margin percentage for the Human Nutrition & Health segment increased by 0.8% for the nine months ended September 30, 2019 as compared to the nine months ended September 30, 2018,

primarily due to mix. Gross margin percentage decreased for Animal Nutrition & Health by 0.7% primarily due to lower global feed grade choline volumes and margins in the European monogastric business as a result of increased competitive activity. Gross margin percentage for the Specialty Products decreased 0.6% compared to the nine month period ended September 30, 2018 primarily due to the impact from Chemogas. Industrial Products gross margin percentage increased by 1.9% compared with the prior year comparable period primarily due to certain lower raw material costs and mix.

Operating Expenses

Operating expenses for the nine months ended September 30, 2019 were \$78,109 or 16.4% of net sales as compared to \$73,061 or 15.2% of net sales for the nine months ended September 30, 2018. The increase was primarily due to incremental operating expenses related to the Chemogas acquisition of \$2,885, a decrease in insurance proceeds associated with the Clearfield fire of \$1,438, and increased bad debt expense of \$908.

Earnings from Operations

Principally as a result of the above-noted details, earnings from operations for the nine months ended September 30, 2019 were \$78,912 as compared to \$79,866 for the nine months ended September 30, 2018, a decrease of \$954 or 1.2%. Earnings from operations as a percentage of sales were 16.5% and 16.6% for the nine months ended September 30, 2019 and 2018, respectively. Earnings from the Human Nutrition & Health segment were \$39,234 an increase of \$3,510 or 9.8%, primarily due to the aforementioned higher sales and mix. Animal Nutrition & Health segment earnings from operations were \$16,423, a decrease of \$3,184 or 16.2%, primarily the result of lower global feed grade choline volumes and margins in the European monogastric business as a result of increased competitive activity. Earnings from operations from the Specialty Products segment were \$22,275, an increase of \$2,799 or 14.4%, primarily due to higher sales and the contribution from Chemogas. Earnings from operations from the Industrial Products segment of \$3,390 for the nine months ended September 30, 2019 decreased \$3,453 compared to the nine months ended September 30, 2018, primarily due to the aforementioned lower sales volumes.

Other Expenses (Income)

Interest expense for the nine months ended September 30, 2019 and 2018 was \$4,749 and \$5,936, respectively, which is primarily related to outstanding borrowings under the Credit Agreement. Other expense was \$53 and \$163 for the nine months ended September 30, 2019 and 2018, respectively.

Income Tax Expense

Our effective tax rate was 20.0% and 21.1% for the nine months ended September 30, 2019 and 2018, respectively.

Net Earnings

Principally as a result of the above-noted details, net earnings for the nine months ended September 30, 2019 were \$59,288 as compared with \$58,239 for the nine months ended September 30, 2018, an increase of \$1,049 or 1.8%.

FINANCIAL CONDITION

LIQUIDITY AND CAPITAL RESOURCES

(All amounts in thousands, except share and per share data)

During the nine months ended September 30, 2019, there were no material changes outside the ordinary course of business in the specified contractual obligations set forth in our Annual Report on Form 10-K for the year ended December 31, 2018. We expect our operations to continue generating sufficient cash flow to fund working capital requirements and necessary capital investments. We are actively pursuing additional acquisition candidates. We could seek additional bank loans or access to financial markets to fund such acquisitions, our operations, working capital, necessary capital investments or other cash requirements should we deem it necessary to do so.

Cash

Cash and cash equivalents increased to \$59,404 at September 30, 2019 from \$54,268 at December 31, 2018. At September 30, 2019, the Company had \$29,768 of cash and cash equivalents held by foreign subsidiaries. It is our intention to permanently reinvest these funds in foreign operations by continuing to make additional plant related investments, and potentially invest in partnerships or acquisitions; therefore, we do not currently expect to repatriate these funds in order to fund U.S. operations or obligations. However, if these funds are needed for U.S. operations, we could be required to pay additional withholding taxes to repatriate these funds. Working capital was \$167,926 at September 30, 2019 as compared to \$144,258 at December 31, 2018, an increase of \$23,668. Working capital reflects the payment of the 2018 declared dividend in 2019 of \$15,135 and proceeds from the sale of business and assets.

Operating Activities

Cash flows from operating activities provided \$91,494 for the nine months ended September 30, 2019 as compared to \$79,185 for the nine months ended September 30, 2018. The increase in cash flows from operating activities was primarily due to working capital changes and an increase in earnings.

Investing Activities

As previously noted, on May 27, 2019, we acquired 100 percent of the outstanding common shares of Chemogas Holding, NV and its Subsidiaries ("Chemogas" or the "Acquisition"), a privately held specialty gases company headquartered in Grimbergen, Belgium. Cash paid for the acquisition, net of cash acquired, amounted to \$94,690.

As noted above, on September 6, 2019, we sold an insignificant portion of the business which is included in "proceeds from sale of business and assets" in the condensed consolidated statements of cash flows.

We continue to invest in corporate projects, improvements across all production facilities, and intangible assets. Total investments in property, plant and equipment and intangible assets were \$21,669 and \$13,691 for the nine months ended September 30, 2019 and 2018, respectively.

Financing Activities

As previously noted, the acquisition of Chemogas was primarily funded through our credit agreement. We borrowed \$123,569 against the revolving loan and also made payments of \$12,222 on the acquired debt. Total debt payments on the revolving loan amounted to \$61,000 during 2019 and we have \$281,431 available under the credit agreement as of September 30, 2019.

We have an approved stock repurchase program. The total authorization under this program is 3,763,038 shares. Since the inception of the program in June 1999, a total of 2,431,767 shares have been purchased, and we had 232,499 shares remaining in treasury at September 30, 2019. We intend to acquire shares from time to time at prevailing market prices if and to the extent we deem it is advisable to do so based on our assessment of corporate cash flow, market conditions and other factors. The Company also repurchases shares from employees in connection with settlement of transactions under the Company's equity incentive plans.

Proceeds from stock options exercised were \$3,734 and \$8,133 for the nine months ended September 30, 2019 and 2018, respectively. Dividend payments were \$15,135 and \$13,428 for the nine months ended September 30, 2019 and 2018, respectively.

Other Matters Impacting Liquidity

We currently provide postretirement benefits in the form of two retirement medical plans, as discussed in Note 15 – Employee Benefit Plans. The liability recorded in other long-term liabilities on the condensed consolidated balance sheets as of September 30, 2019 and December 31, 2018 was \$1,250 and \$1,174, respectively, and the plans are not funded. Historical cash payments made under these plans have typically been less than \$100 per year. We do not anticipate any changes to the payments made in the current year for the plans.

On June 1, 2018, we established an unfunded, nonqualified deferred compensation plan maintained for the benefit of a select group of management or highly compensated employees. Assets of the plan are held in a rabbi trust, which are subject to additional risk of loss in the event of bankruptcy or insolvency of the Company. The deferred compensation liability as of September 30, 2019 and December 31, 2018 was \$1,803 and \$265, respectively, and is included in other long-term obligations on our balance sheet.

On May 27, 2019, we acquired Chemogas, which had two defined benefit pension plans (DB plans), one of which was closed on December 31, 2018 and replaced by four individual defined contribution plans. The active pension plan is funded by means of employee and Company contributions and provide for the payment of a lump sum at retirement or payments in case of death of the covered employees. The DB plan is considered a post-employment benefit. The amount recorded for these obligations on our balance sheets as of September 30, 2019 was \$580 and is included in other long-term obligations.

Critical Accounting Policies

In the second quarter of 2019, we entered into financial arrangements as part of our ongoing asset and liability management activities. We use derivative financial instruments to hedge fair values of underlying assets and liabilities or future cash flows which are exposed to interest rate or foreign currency fluctuations. We do not enter into derivative financial instruments for trading or speculative purposes. Refer to Note 20, "Derivative Instruments and Hedging Activities" for detailed information about our derivative financial instruments.

Other than what is noted above, there were no changes to the Company's Critical Accounting Policies, as described in its December 31, 2018 Annual Report on Form 10-K, during the nine months ended September 30, 2019.

Related Party Transactions

We were engaged in related party transactions with St. Gabriel CC Company, LLC during the three and nine months ended September 30, 2019. Refer to Note 18, "Related Party Transactions".

Item 3. Quantitative and Qualitative Disclosures About Market Risk

Our cash and cash equivalents are held primarily in certificates of deposit and money market investment funds. In the second quarter of 2019, we entered into an interest rate swap and cross-currency swap for hedging purposes. Refer to details noted below. Additionally, as of September 30, 2019, our borrowings were under a revolving loan bearing interest at a fluctuating rate as defined by the Credit Agreement plus an applicable rate. The applicable rate is based upon our consolidated net leverage ratio, as defined in the Credit Agreement. A 100 basis point increase or decrease in interest rates, applied to our borrowings at September 30, 2019, would result in an increase or decrease in annual interest expense and a corresponding reduction or increase in cash flow of approximately \$2,186. We are exposed to commodity price risks, including prices of our primary raw materials. Our objective is to seek a reduction in the potential negative earnings impact of raw material pricing arising in our business activities. We manage these financial exposures, where possible, through pricing and operational means. Our practices may change as economic conditions change.

Interest Rate Risk

We have exposure to market risk for changes in interest rates, including the interest rate relating to our credit agreement dated June 27, 2018. In the second quarter of 2019, we began to manage our interest rate exposure through the use of derivative instruments. All of our derivative instruments are utilized for risk management purposes, and are not used for trading or speculative purposes. We have hedged a portion of our floating interest rate exposure using an interest rate swap (see Note 20 to our condensed consolidated financial statements). As of September 30, 2019, the notional amount of our outstanding interest rate swap was \$108,569.

Foreign Currency Exchange Risk

We are also exposed to foreign currency exchange risk. Specifically, we are exposed to changes in exchange rates between the U.S. dollar and Euro. In the second quarter of 2019, we entered into a cross-currency swap, with a notional amount of \$108,569, which we designated as a hedge of our net investment in Chemogas.

Item 4. Controls and Procedures

(a) Evaluation of Disclosure Controls and Procedures

Prior to filing this report, we completed an evaluation under the supervision and with the participation of our management, including our Chief Executive Officer and Chief Financial Officer, of the effectiveness of the design and operation of our disclosure controls and procedures as defined in Rule 13a-15(e) of the Exchange Act as of September 30, 2019. Based on this evaluation, our Chief Executive Officer and Chief Financial Officer concluded that our disclosure controls and procedures were effective at the reasonable assurance level as of September 30, 2019.

(b) Changes in Internal Controls

There have been no changes in the internal controls over financial reporting (as defined in Rules 13a-15(f) and 15d-15(f) under the Act) during the fiscal quarter ended September 30, 2019, that have materially affected, or are reasonably likely to materially affect, internal control over financial reporting.

Part II. Other Information

Item 1A. Risk Factors

There have been no material changes in the Risk Factors identified in the Company's Annual Report on Form 10-K for the year ended December 31, 2018.

Item 2C. Issuer Purchase of Equity Securities

The following table summarizes the share repurchase activity for the three months ended September 30, 2019:

	Total Number of Shares Purchased (1)	Average Price Paid Per Share ⁽²⁾		Total Number of Shares Purchased as Part of Publicly Announced Programs (1)	Approximate Dollar Value of Shares that May Yet Be Purchased Under the Plans or Programs		
July 1-31, 2019	_	\$			\$	136,548,396	
August 1-31, 2019	208,499	\$	88.48	208,499	\$	122,262,250	
September 1-30, 2019	24,000	\$	89.45	24,000	\$	121,313,268	
	232,499			232,499			

⁽¹⁾ We have an approved stock repurchase program. The total authorization under this program is 3,763,038 shares. Since the inception of the program in June 1999, a total of 2,431,767 shares have been purchased, of which 232,499 shares remained in treasury at September 30, 2019. There is no expiration for this program.

Item 6. Exhibits

<u>Description</u>
Balchem Corporation By-Laws as Amended and Restated as of September 12, 2019.
Certification of Chief Executive Officer pursuant to Rule 13a-14(a).
Certification of Chief Financial Officer pursuant to Rule 13a-14(a).
Certification of Chief Executive Officer pursuant to Rule 13a-14(b) and Section 1350 of Chapter 63 of Title 18 of the United States Code.
Certification of Chief Financial Officer pursuant to Rule 13a-14(b) and Section 1350 of Chapter 63 of Title 18 of the United States Code.
XBRL Instance Document
XBRL Taxonomy Extension Schema Document
XBRL Taxonomy Extension Calculation Linkbase Document
XBRL Taxonomy Extension Definition Linkbase Document
XBRL Taxonomy Extension Label Linkbase Document
XBRL Taxonomy Extension Presentation Linkbase Document

⁽²⁾ Average price paid per share includes costs associated with the repurchases

SIGNATURES

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

BALCHEM CORPORATION

By: /s/ Theodore L. Harris

Theodore L. Harris, Chairman, President and Chief Executive Officer

By: /s/ Martin Bengtsson

Martin Bengtsson, Chief Financial Officer and Treasurer

Date: November 5, 2019