

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

FORM 10-Q

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

For the quarterly period ended September 30, 2017

OR

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

For the transition period from _____ to _____

Commission File Number 1-71

HEXION INC.

(Exact name of registrant as specified in its charter)

New Jersey

(State or other jurisdiction of
incorporation or organization)

13-0511250

(I.R.S. Employer
Identification No.)

180 East Broad St., Columbus, OH 43215

(Address of principal executive offices including zip code)

614-225-4000

(Registrant's telephone number including area code)

(Former name, former address and former fiscal year, if changed since last report)

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

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

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

| | | | |
|-------------------------|-------------------------------------|---|--------------------------|
| Large accelerated filer | <input type="checkbox"/> | Accelerated filer | <input type="checkbox"/> |
| Non-accelerated filer | <input checked="" type="checkbox"/> | (Do not check if a smaller reporting company) | |
| | | Smaller reporting company | <input type="checkbox"/> |
| | | Emerging growth company | <input type="checkbox"/> |

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

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

Number of shares of common stock, par value \$0.01 per share, outstanding as of the close of business on November 1, 2017: 82,556,847

HEXION INC.

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HEXION INC.
CONDENSED CONSOLIDATED BALANCE SHEETS (Unaudited)

| <u>(In millions, except share data)</u> | September 30, 2017 | December 31, 2016 |
|---|-----------------------|----------------------|
| Assets | | |
| Current assets: | | |
| Cash and cash equivalents (including restricted cash of \$18 and \$17, respectively) | \$ 118 | \$ 196 |
| Accounts receivable (net of allowance for doubtful accounts of \$18 and \$17, respectively) | 500 | 390 |
| Inventories: | | |
| Finished and in-process goods | 240 | 199 |
| Raw materials and supplies | 92 | 88 |
| Other current assets | 49 | 45 |
| Total current assets | <u>999</u> | <u>918</u> |
| Investment in unconsolidated entities | 20 | 18 |
| Deferred income taxes | 12 | 10 |
| Other long-term assets | 49 | 43 |
| Property and equipment: | | |
| Land | 84 | 79 |
| Buildings | 288 | 273 |
| Machinery and equipment | 2,312 | 2,353 |
| | <u>2,684</u> | <u>2,705</u> |
| Less accumulated depreciation | <u>(1,766)</u> | <u>(1,812)</u> |
| | 918 | 893 |
| Goodwill | 113 | 121 |
| Other intangible assets, net | 45 | 52 |
| Total assets | <u>\$ 2,156</u> | <u>\$ 2,055</u> |
| Liabilities and Deficit | | |
| Current liabilities: | | |
| Accounts payable | \$ 347 | \$ 368 |
| Debt payable within one year | 121 | 107 |
| Interest payable | 101 | 70 |
| Income taxes payable | 13 | 13 |
| Accrued payroll and incentive compensation | 47 | 55 |
| Other current liabilities | 126 | 159 |
| Total current liabilities | <u>755</u> | <u>772</u> |
| Long-term liabilities: | | |
| Long-term debt | 3,612 | 3,397 |
| Long-term pension and post employment benefit obligations | 263 | 246 |
| Deferred income taxes | 13 | 13 |
| Other long-term liabilities | 173 | 166 |
| Total liabilities | <u>4,816</u> | <u>4,594</u> |
| Commitments and contingencies (see Note 7) | | |
| Deficit | | |
| Common stock—\$0.01 par value; 300,000,000 shares authorized, 170,605,906 issued and 82,556,847 outstanding at September 30, 2017 and December 31, 2016 | 1 | 1 |
| Paid-in capital | 526 | 526 |
| Treasury stock, at cost—88,049,059 shares | (296) | (296) |
| Accumulated other comprehensive loss | (14) | (39) |
| Accumulated deficit | (2,876) | (2,730) |
| Total Hexion Inc. shareholder's deficit | <u>(2,659)</u> | <u>(2,538)</u> |
| Noncontrolling interest | (1) | (1) |
| Total deficit | <u>(2,660)</u> | <u>(2,539)</u> |
| Total liabilities and deficit | <u>\$ 2,156</u> | <u>\$ 2,055</u> |

See Notes to Condensed Consolidated Financial Statements

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HEXION INC.
CONDENSED CONSOLIDATED STATEMENTS OF OPERATIONS (Unaudited)

| (In millions) | Three Months Ended September 30, | | Nine Months Ended September 30, | |
|---|----------------------------------|---------|---------------------------------|----------|
| | 2017 | 2016 | 2017 | 2016 |
| Net sales | \$ 914 | \$ 819 | \$ 2,696 | \$ 2,680 |
| Cost of sales | 797 | 701 | 2,312 | 2,357 |
| Gross profit | 117 | 118 | 384 | 323 |
| Selling, general and administrative expense | 75 | 69 | 227 | 235 |
| Gain on dispositions | — | — | — | (240) |
| Asset impairments (see Note 5) | 13 | — | 13 | — |
| Business realignment costs (income) | 10 | (3) | 27 | 42 |
| Other operating expense, net | 1 | 7 | 4 | 6 |
| Operating income | 18 | 45 | 113 | 280 |
| Interest expense, net | 82 | 76 | 247 | 235 |
| (Gain) loss on extinguishment of debt | — | (3) | 3 | (47) |
| Other non-operating (income) expense, net | (3) | 2 | (4) | 1 |
| (Loss) income before income tax and earnings from unconsolidated entities | (61) | (30) | (133) | 91 |
| Income tax expense | 9 | 16 | 16 | 40 |
| (Loss) income before (losses) earnings from unconsolidated entities | (70) | (46) | (149) | 51 |
| (Losses) earnings from unconsolidated entities, net of taxes | — | (1) | 3 | 8 |
| Net (loss) income | \$ (70) | \$ (47) | \$ (146) | \$ 59 |

See Notes to Condensed Consolidated Financial Statements

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CONDENSED CONSOLIDATED STATEMENTS OF COMPREHENSIVE (LOSS) INCOME (Unaudited)

| <u>(In millions)</u> | <u>Three Months Ended</u> <u>September 30,</u> | | <u>Nine Months Ended</u> <u>September 30,</u> | |
|--|---|----------------|--|--------------|
| | <u>2017</u> | <u>2016</u> | <u>2017</u> | <u>2016</u> |
| Net (loss) income | \$ (70) | \$ (47) | \$ (146) | \$ 59 |
| Other comprehensive income, net of tax: | | | | |
| Foreign currency translation adjustments | 10 | 7 | 25 | 8 |
| Loss recognized from pension and postretirement benefits | — | — | — | (1) |
| Other comprehensive income | 10 | 7 | 25 | 7 |
| Comprehensive (loss) income | <u>\$ (60)</u> | <u>\$ (40)</u> | <u>\$ (121)</u> | <u>\$ 66</u> |

See Notes to Condensed Consolidated Financial Statements

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HEXION INC.
CONDENSED CONSOLIDATED STATEMENTS OF CASH FLOWS (Unaudited)

| (In millions) | Nine Months Ended September 30, | |
|--|---------------------------------|--------|
| | 2017 | 2016 |
| Cash flows used in operating activities | | |
| Net (loss) income | \$ (146) | \$ 59 |
| Adjustments to reconcile net (loss) income to net cash used in operating activities: | | |
| Depreciation and amortization | 85 | 101 |
| Non-cash asset impairments and accelerated depreciation | 27 | 127 |
| Deferred tax (benefit) expense | (1) | 3 |
| Gain on dispositions | — | (240) |
| Gain on sale of assets | (1) | — |
| Amortization of deferred financing fees | 12 | 11 |
| Loss (gain) on extinguishment of debt | 3 | (47) |
| Unrealized foreign currency gains | (5) | (40) |
| Other non-cash adjustments | (4) | 3 |
| Net change in assets and liabilities: | | |
| Accounts receivable | (89) | (88) |
| Inventories | (29) | (32) |
| Accounts payable | (32) | (35) |
| Income taxes payable | 8 | 26 |
| Other assets, current and non-current | (4) | (27) |
| Other liabilities, current and long-term | (29) | 48 |
| Net cash used in operating activities | (205) | (131) |
| Cash flows (used in) provided by investing activities | | |
| Capital expenditures | (86) | (91) |
| Capitalized interest | (1) | (1) |
| Proceeds from dispositions, net | — | 281 |
| Cash received on buyer's note | — | 45 |
| Proceeds from sale of assets, net | 5 | 1 |
| Change in restricted cash | 1 | (11) |
| Investment in affiliate | — | (1) |
| Net cash (used in) provided by investing activities | (81) | 223 |
| Cash flows provided by (used in) financing activities | | |
| Net short-term debt borrowings (repayments) | 15 | (13) |
| Borrowings of long-term debt | 1,291 | 461 |
| Repayments of long-term debt | (1,079) | (643) |
| Long-term debt and credit facility financing fees paid | (25) | — |
| Net cash provided by (used in) financing activities | 202 | (195) |
| Effect of exchange rates on cash and cash equivalents | 5 | 1 |
| Change in cash and cash equivalents | (79) | (102) |
| Cash and cash equivalents (unrestricted) at beginning of period | 179 | 228 |
| Cash and cash equivalents (unrestricted) at end of period | \$ 100 | \$ 126 |
| Supplemental disclosures of cash flow information | | |
| Cash paid for: | | |
| Interest, net | \$ 205 | \$ 210 |
| Income taxes, net | 10 | 20 |
| Non-cash investing activity: | | |
| Acceptance of buyer's note | \$ — | \$ 75 |

See Notes to Condensed Consolidated Financial Statements

HEXION INC.
CONDENSED CONSOLIDATED STATEMENT OF DEFICIT (Unaudited)

| (In millions) | Common Stock | Paid-in Capital | Treasury Stock | Accumulated Other Comprehensive Loss | Accumulated Deficit | Total Hexion Inc. Deficit | Noncontrolling Interest | Total |
|-------------------------------|-----------------|--------------------|-------------------|---|------------------------|------------------------------------|----------------------------|-------------------|
| Balance at December 31, 2016 | \$ 1 | \$ 526 | \$ (296) | \$ (39) | \$ (2,730) | \$ (2,538) | \$ (1) | \$ (2,539) |
| Net loss | — | — | — | — | (146) | (146) | — | (146) |
| Other comprehensive income | — | — | — | 25 | — | 25 | — | 25 |
| Balance at September 30, 2017 | <u>\$ 1</u> | <u>\$ 526</u> | <u>\$ (296)</u> | <u>\$ (14)</u> | <u>\$ (2,876)</u> | <u>\$ (2,659)</u> | <u>\$ (1)</u> | <u>\$ (2,660)</u> |

See Notes to Condensed Consolidated Financial Statements

NOTES TO CONDENSED CONSOLIDATED FINANCIAL STATEMENTS (Unaudited)

(In millions, except share data)

1. Background and Basis of Presentation

Based in Columbus, Ohio, Hexion Inc. (“Hexion” or the “Company”) serves global industrial markets through a broad range of thermoset technologies, specialty products and technical support for customers in a diverse range of applications and industries. The Company’s business is organized based on the products offered and the markets served. At September 30, 2017, the Company had two reportable segments: Epoxy, Phenolic and Coating Resins and Forest Products Resins.

The Company’s direct parent is Hexion LLC, a holding company and wholly owned subsidiary of Hexion Holdings LLC (“Hexion Holdings”), the ultimate parent entity of Hexion. Hexion Holdings is controlled by investment funds managed by affiliates of Apollo Management Holdings, L.P. (together with Apollo Global Management, LLC and its subsidiaries, “Apollo”). Apollo may also be referred to as the Company’s owner.

The unaudited Condensed Consolidated Financial Statements include the accounts of the Company, its majority-owned subsidiaries in which minority shareholders hold no substantive participating rights and variable interest entities in which the Company is the primary beneficiary. Intercompany accounts and transactions are eliminated in consolidation. In the opinion of management, all adjustments consisting of normal, recurring adjustments considered necessary for a fair statement have been included. Results for the interim periods are not necessarily indicative of results for the entire year.

Year-end condensed consolidated balance sheet data was derived from audited financial statements, but does not include all disclosures required by accounting principles generally accepted in the United States of America (“U.S. GAAP”).

Pursuant to the rules and regulations of the Securities and Exchange Commission, certain information and disclosures normally included in financial statements prepared in accordance with U.S. GAAP have been condensed or omitted. These unaudited Condensed Consolidated Financial Statements should be read in conjunction with the audited Consolidated Financial Statements and the accompanying notes included in the Company’s most recent Annual Report on Form 10-K.

2. Summary of Significant Accounting Policies

Use of Estimates—The preparation of financial statements in conformity with U.S. GAAP requires management to make estimates and assumptions that affect the reported amounts of assets and liabilities, and also requires the disclosure of contingent assets and liabilities at the date of the financial statements. In addition, it requires management to make estimates and assumptions that affect the reported amounts of revenues and expenses during the reporting period. Actual results could differ from these estimates.

Subsequent Events—The Company has evaluated events and transactions subsequent to September 30, 2017 through the date of issuance of its unaudited Condensed Consolidated Financial Statements.

Recently Issued Accounting Standards

In May 2014, the Financial Accounting Standards Board (“FASB”) issued Accounting Standards Board Update No. 2014-09: *Revenue from Contracts with Customers (Topic 606)* (“ASU 2014-09”). ASU 2014-09 supersedes the existing revenue recognition guidance and most industry-specific guidance applicable to revenue recognition. According to the new guidance, an entity will apply a principles-based five step model to recognize revenue upon the transfer of promised goods or services to customers and in an amount that reflects the consideration for which the entity expects to be entitled in exchange for those goods or services. The effective date for ASU 2014-09 is for annual and interim periods beginning on or after December 15, 2017, and early adoption will be permitted for annual and interim periods beginning on or after December 15, 2016. Entities will have the option of using either a full retrospective approach or a modified approach to adopt the guidance in ASU 2014-09. The Company plans to adopt ASU 2014-09 utilizing a modified retrospective approach, which will result in a cumulative adjustment to equity on the adoption date of January 1, 2018. The Company currently anticipates that implementation of this standard will result only in timing differences for certain revenue streams, which are not expected to have a material impact on its financial statements.

In February 2016, the FASB issued Accounting Standards Board Update No. 2016-02: *Leases (Topic 842)* (“ASU 2016-02”). ASU 2016-02 supersedes the existing lease guidance in Topic 840. According to the new guidance, all leases, with limited scope exceptions, will be recorded on the balance sheet in the form of a liability to make lease payments (lease liability) and a right-of-use asset representing the right to use the underlying asset for the lease term. The guidance is effective for annual and interim periods beginning on or after December 15, 2018, and early adoption is permitted. Entities will be required to adopt ASU 2016-02 using a modified retrospective approach, whereby leases will be recognized and measured at the beginning of the earliest period presented. The Company is currently assessing the potential impact of ASU 2016-02 on its financial statements.

In August 2016, the FASB issued Accounting Standards Board Update No. 2016-15: *Statement of Cash Flows (Topic 230)* (“ASU 2016-15”) as part of the FASB simplification initiative. ASU 2016-15 provides guidance on treatment in the statement of cash flows for eight specific cash flow topics, with the objective of reducing existing diversity in practice. Of the eight cash flow topics addressed in the new guidance, the topics expected to have an impact on the Company include debt prepayment or debt extinguishment costs, proceeds from the settlement of insurance claims, treatment of restricted cash and distributions received from equity method investees. The guidance is effective for annual periods beginning after December 15, 2017, including interim periods within that reporting period, and early adoption is permitted. The Company is currently assessing the potential impact of ASU 2016-15 on its financial statements.

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In November 2016, the FASB issued Accounting Standards Board Update No. 2016-18: *Statement of Cash Flows (Topic 230) Restricted Cash* (“ASU 2016-18”) as part of the FASB simplification initiative. ASU 2016-18 requires that amounts generally described as restricted cash and restricted cash equivalents should be included with cash and cash equivalents when reconciling the beginning-of-period and end-of period total amounts shown on the statement of cash flows. ASU 2016-18 also requires supplemental disclosure regarding the nature of restrictions on a company’s cash and cash equivalents, such as the purpose and terms of the restriction, expected duration of the restriction and the amount of cash subject to restriction. The guidance is effective for annual periods beginning after December 15, 2017, including interim periods within that reporting period, and early adoption is permitted. Based on restricted cash balances at December 31, 2016 and September 30, 2017, beginning and ending cash balances in the Condensed Consolidated Statements of Cash Flows would include \$17 and \$18, respectively, of restricted cash upon adoption of this standard.

In January 2017, the FASB issued Accounting Standards Board Update No. 2017-01: *Clarifying the Definition of a Business (Topic 805)* (“ASU 2017-01”). ASU 2017-01 clarifies the definition of a business with the objective of adding guidance to assist entities with evaluating whether transactions should be accounted for as acquisitions (or disposals) of assets or businesses. The definition of a business affects many areas of accounting including acquisitions, disposals, goodwill, and consolidation. The guidance is effective for annual periods beginning after December 15, 2017, including interim periods within that reporting period, and early adoption is permitted. The Company is currently assessing the potential impact of ASU 2017-01 on its financial statements.

In March 2017, the FASB issued Accounting Standards Board Update No. 2017-07: *Improving the Presentation of Net Periodic Pension Cost and Net Periodic Postretirement Benefit Cost* (“ASU 2017-07”). ASU 2017-07 requires that an employer report the service cost component of its net periodic pension and postretirement benefit costs (“net benefit cost”) in the same line item or items as other compensation costs arising from services rendered by employees during the period. Additionally, ASU 2017-07 only allows the service cost component of net benefit cost to be eligible for capitalization into inventory. All other components of net benefit cost, which primarily include interest cost, expected return on assets and the annual mark-to-market liability remeasurement, are required to be presented in the income statement separately from the service cost component and outside of income from operations. The guidance is effective for annual periods beginning after December 15, 2017, including interim periods within that reporting period, and early adoption was only permitted in the first quarter of 2017. The Company is currently assessing the potential impact of ASU 2017-07 on its financial statements.

Recently Adopted Accounting Standards

In July 2015, the FASB issued Accounting Standards Board Update No. 2015-11: *Simplifying the Measurement of Inventory (Topic 330)* (“ASU 2015-11”) as part of the FASB simplification initiative. ASU 2015-11 replaces the existing concept of market value of inventory (where market was defined as replacement cost, with a ceiling of net realizable value and floor of net realizable value less a normal profit margin) with the single measurement of net realizable value. The guidance is effective for annual periods beginning after December 15, 2016, including interim periods within that reporting period. The Company adopted ASU 2015-11 as of January 1, 2017 and adoption of this standard had no impact on the Company’s financial statements.

In March 2016, the FASB issued Accounting Standards Board Update No. 2016-07: *Simplifying the Transition to the Equity Method of Accounting (Topic 323)* (“ASU 2016-07”) as part of the FASB simplification initiative. ASU 2016-07 eliminates the requirement that when an existing investment qualifies for use of the equity method, an investor adjust the investment, results of operations and retained earnings retroactively as if the equity method has been in effect in all previous periods that the investment had been held. Under the new guidance, the equity method investor is only required to adopt the equity method as of the date the investment qualifies for the equity method, with no retrospective adjustment required. The guidance is effective for annual periods beginning after December 15, 2016, including interim periods within that reporting period. The Company adopted ASU 2016-07 as of January 1, 2017 and adoption of this standard had no impact on the Company’s financial statements.

In March 2016, the FASB issued Accounting Standards Board Update No. 2016-09: *Improvements to Employee Share-Based Payment Accounting (Topic 718)* (“ASU 2016-09”) as part of the FASB simplification initiative. ASU 2016-09 simplifies various aspects of share-based payment accounting, including the income tax consequences, classification of equity awards as either equity or liabilities and classification on the statement of cash flows. The guidance is effective for annual periods beginning after December 15, 2016, including interim periods within that reporting period. The Company adopted ASU 2016-09 as of January 1, 2017 and adoption of this standard had no impact on the Company’s financial statements.

In January 2017, the FASB issued Accounting Standards Board Update No. 2017-04: *Simplifying the Test for Goodwill Impairment (Topic 350)* (“ASU 2017-04”) as part of the FASB simplification initiative. To simplify the subsequent measurement of goodwill, ASU 2017-04 eliminated Step 2 from the goodwill impairment test. Instead, under the amendments in ASU 2017-04, an entity should perform its annual, or interim, goodwill impairment test by comparing the fair value of the reporting unit with its carrying amount, which is Step 1 of the goodwill impairment test. An impairment charge should be recognized for the amount by which the carrying amount exceeds the reporting unit’s fair value, not to exceed the total amount of goodwill allocated to that reporting unit. The guidance is effective for goodwill impairment tests performed after December 15, 2019 and early adoption is permitted. The Company early adopted ASU 2017-04 during the third quarter 2017. See Note 5 for more information.

3. Restructuring & Business Realignment**2017 Restructuring Activities**

In November 2017, the Company initiated new restructuring actions with the intent to optimize its cost structure. The Company expects these restructuring actions to generate approximately \$40 of incremental cost savings over the next 12 to 18 months. As of the filing date of this Quarterly Report on Form 10-Q, the total one-time cash costs expected to be incurred for these restructuring activities are estimated between \$30 and \$40, consisting primarily of workforce reduction costs.

Oilfield

During the third quarter of 2017, the Company indefinitely idled an oilfield manufacturing facility within its Epoxy, Phenolic and Coating Resins segment, and production was ceased at this facility. As a result, the estimated useful lives of certain long-lived assets related to this facility were shortened, and consequently, during the three months ended September 30, 2017, the Company incurred \$14 of accelerated depreciation related to these assets, which is included in "Cost of sales" in the unaudited Condensed Consolidated Statements of Operations.

Norco

In the first quarter of 2016, the Company announced a planned rationalization at its Norco, LA manufacturing facility within its Epoxy, Phenolic and Coating Resins segment, and production was ceased at this facility during the second quarter of 2016. As a result of this facility rationalization, the Company recorded one-time costs in 2016 related to the early termination of certain contracts for utilities, site services, raw materials and other items. The Company also recorded a conditional asset retirement obligation ("ARO") in 2016 related to certain contractually obligated future demolition, decontamination and repair costs associated with this facility rationalization. The Company does not expect to incur any additional contract termination or ARO charges related to this facility rationalization.

The table below summarizes the changes in the liabilities recorded related to contract termination costs and ARO from December 31, 2016 to September 30, 2017, all of which are included in "Other current liabilities" in the unaudited Condensed Consolidated Balance Sheets.

| | Contract Termination Costs | Asset Retirement Obligation | Total |
|---|---------------------------------------|--|--------------|
| Accrued liability at December 31, 2016 | \$ 18 | \$ 13 | \$ 31 |
| Activity ⁽¹⁾ | (15) | (13) | (28) |
| Accrued liability at September 30, 2017 | <u>\$ 3</u> | <u>\$ —</u> | <u>\$ 3</u> |

(1) These amounts include \$23 of cash payments during the nine months ended September 30, 2017 and \$5 of these amounts are included in "Accounts payable" in the unaudited Condensed Consolidated Balance Sheets as of September 30, 2017.

As a result of the announcement of the Norco facility rationalization, the estimated useful lives of certain long-lived assets related to this facility were shortened, and consequently, during the nine months ended September 30, 2016, the Company incurred \$76 of accelerated depreciation related to these assets, which is included in "Cost of sales" in the unaudited Condensed Consolidated Statements of Operations. These assets were fully depreciated in the second quarter of 2016. In addition, at June 30, 2016 the Company recorded a conditional ARO of \$30 related to certain contractually obligated future demolition, decontamination and repair costs associated with this facility rationalization. During the nine months ended September 30, 2016, the Company recorded an additional \$30 of accelerated depreciation related to this ARO, which is also included in "Cost of sales" in the unaudited Condensed Consolidated Statements of Operations, rendering this item fully depreciated as of June 30, 2016. During the three months ended September 30, 2016, this ARO liability was reduced by \$11 as a result of revised cost estimates, primarily due to a reduction in the scope of expected future demolition. This \$11 reduction in costs is included in "Business realignment costs (income)" in the unaudited Condensed Consolidated Statements of Operations for both the three and nine months ended September 30, 2016.

Lastly, during the three months and nine months ended September 30, 2017, the Company incurred additional costs of less than \$1 and \$3, respectively, related to other ongoing site closure expenses related to this facility rationalization, which are included in "Business realignment costs (income)" in the unaudited Condensed Consolidated Statements of Operations. During the nine months ended September 30, 2016, the Company incurred costs of \$23 related to the early termination of certain contracts for utilities, site services, raw materials and other items related to this facility rationalization and \$13 related to abnormal production overhead, severance and other expenses to the facility closure. All of these costs are included in "Business realignment costs (income)" in the unaudited Condensed Consolidated Statements of Operations.

4. Related Party Transactions

Administrative Service, Management and Consulting Arrangement

The Company is subject to a Management Consulting Agreement with Apollo (the "Management Consulting Agreement") that renews on an annual basis, unless notice to the contrary is given by either party. Under the Management Consulting Agreement, the Company receives certain structuring and advisory services from Apollo and its affiliates. The Management Consulting Agreement provides indemnification to Apollo, its affiliates and their directors, officers and representatives for potential losses arising from these services. Apollo is entitled to an annual fee equal to the greater of \$3 or 2% of the Company's Adjusted EBITDA. Apollo elected to waive charges of any portion of the annual management fee due in excess of \$3 for the calendar year 2017.

During the three months ended September 30, 2017 and 2016 and during the nine months ended September 30, 2017 and 2016, the Company recognized expense under the Management Consulting Agreement of \$1 and \$2, respectively. This amount is included in "Other operating expense, net" in the unaudited Condensed Consolidated Statements of Operations.

Transactions with MPM

Shared Services Agreement

On October 1, 2010, the Company entered into a shared services agreement with Momentive Performance Materials Inc. ("MPM") (which, from October 1, 2010 through October 24, 2014, was a subsidiary of Hexion Holdings), as amended in October 2014 (the "Shared Services Agreement"). Under this agreement, the Company provides to MPM, and MPM provides to the Company, certain services, including, but not limited to, executive and senior management, administrative support, human resources, information technology support, accounting, finance, legal and procurement services. The Shared Services Agreement establishes certain criteria upon which the costs of such services are allocated between the Company and MPM. The Shared Services Agreement was renewed for one year starting October 2017 and is subject to termination by either the Company or MPM, without cause, on not less than 30 days' written notice, and expires in October 2018 (subject to one-year renewals every year thereafter; absent contrary notice from either party). The Company periodically reviews the scope of services provided under this agreement and has recently begun efforts to reduce the scope of services provided by the Company, in particular with respect to human resources, information technology and accounting and finance.

Pursuant to the Shared Services Agreement, during the nine months ended September 30, 2017 and 2016, the Company incurred approximately \$41 and \$50, respectively, of net costs for shared services and MPM incurred approximately \$31 and \$38, respectively, of net costs for shared services. Included in the net costs incurred during the nine months ended September 30, 2017 and 2016, were net billings from the Company to MPM of \$21 and \$23, respectively, to bring the percentage of total net incurred costs for shared services under the Shared Services Agreement to the applicable agreed upon allocation percentage. The Company had accounts receivable from MPM of \$2 and \$5 as of September 30, 2017 and December 31, 2016, respectively, and no accounts payable to MPM.

Sales and Purchases of Products with MPM

The Company also sells products to, and purchases products from, MPM. During the three months ended September 30, 2017 and 2016, the Company sold less than \$1 of products to MPM and purchased \$6 and \$7, respectively. During the nine months ended September 30, 2017 and 2016, the Company sold less than \$1 of products to MPM and purchased \$18 and \$22, respectively. During the three and nine months ended September 30, 2017 and 2016, the Company earned less than \$1 from MPM as compensation for acting as distributor of products. The Company had no accounts receivable from MPM at September 30, 2017 and accounts receivable of less than \$1 at December 31, 2016. As of both September 30, 2017 and December 31, 2016, the Company had \$2 of accounts payable to MPM.

Purchases and Sales of Products and Services with Apollo Affiliates Other than MPM

The Company sells products to various Apollo affiliates other than MPM. These sales were \$1 and less than \$1 for the three months ended September 30, 2017 and 2016, respectively, and \$3 and \$6 for the nine months ended September 30, 2017 and 2016, respectively. Accounts receivable from these affiliates were less than \$1 at both September 30, 2017 and December 31, 2016. The Company also purchases raw materials and services from various Apollo affiliates other than MPM. There were no purchases for the three and nine months ended September 30, 2017 and purchases of less than \$1 for the three and nine months ended September 30, 2016, respectively. The Company had no accounts payable to these affiliates at September 30, 2017 and accounts payable of less than \$1 at December 31, 2016.

Other Transactions and Arrangements

The Company sells products and provides services to, and purchases products from, its joint ventures which are recorded under the equity method of accounting. These sales were \$1 and \$4 for the three months ended September 30, 2017 and 2016, respectively, and \$9 and \$38 for the nine months ended September 30, 2017 and 2016, respectively. Accounts receivable from these joint ventures were \$5 and \$7 at September 30, 2017 and December 31, 2016, respectively. These purchases were \$3 and \$4 for the three months ended September 30, 2017 and 2016, respectively, and \$10 and \$14 for the nine months ended September 30, 2017 and 2016, respectively. The Company had accounts payable to these joint ventures of less than \$1 and \$1 at September 30, 2017 and December 31, 2016, respectively.

The Company had a loan receivable of \$6 and royalties receivable of \$2 as of both September 30, 2017 and December 31, 2016 from its unconsolidated forest products joint venture in Russia. Note that these royalties receivable are also included in the accounts receivable from joint ventures disclosed above.

5. Fair Value

Fair value is the exchange price that would be received for an asset or paid to transfer a liability (an exit price) in the principal or most advantageous market for the asset or liability in an orderly transaction between market participants on the measurement date. Fair value measurement provisions establish a fair value hierarchy which requires an entity to maximize the use of observable inputs and minimize the use of unobservable inputs when measuring fair value. This guidance describes three levels of inputs that may be used to measure fair value:

- **Level 1:** Inputs are quoted prices (unadjusted) for identical assets or liabilities in active markets.
- **Level 2:** Pricing inputs are other than quoted prices in active markets included in Level 1, which are either directly or indirectly observable as of the reported date.
- **Level 3:** Unobservable inputs that are supported by little or no market activity and are developed based on the best information available in the circumstances. For example, inputs derived through extrapolation or interpolation that cannot be corroborated by observable market data.

Recurring Fair Value Measurements

As of September 30, 2017, the Company had derivative liabilities related to electricity, natural gas and foreign exchange contracts of less than \$1, which were measured using level 2 inputs, and consisted of derivative instruments transacted primarily in over-the-counter markets. There were no transfers between Level 1, Level 2 or Level 3 measurements during the nine months ended September 30, 2017 or 2016.

The Company calculates the fair value of its Level 2 derivative liabilities using standard pricing models with market-based inputs, adjusted for nonperformance risk. When its financial instruments are in a liability position, the Company evaluates its credit risk as a component of fair value. At both September 30, 2017 and December 31, 2016, no adjustment was made by the Company to reduce its derivative position for nonperformance risk.

When its financial instruments are in an asset position, the Company is exposed to credit loss in the event of nonperformance by other parties to these contracts and evaluates their credit risk as a component of fair value.

Non-recurring Fair Value Measurements**Goodwill**

In 2017, the Company lowered its forecast of estimated earnings and cash flows for its oilfield business from those previously projected, and indefinitely idled a manufacturing facility within its oilfield business. This was due to the slower than previously assumed recovery in the oil and gas market. As of September 30, 2017, the estimated fair value of the Company's oilfield reporting unit was less than the carrying value of the net assets of the reporting unit. In estimating the fair value of the oilfield reporting unit, the Company relied solely on a discounted cash flow model income approach. This was due to the Company's belief that the reporting unit's EBITDA, a key input under the market approach, was not representative and consistent with the reporting unit's historical performance and long-term outlook and, therefore, was not consistent with assumptions that a market participant would use in determining the fair value of the reporting unit. To measure the amount of the goodwill impairment, the Company allocated the estimated fair value of the reporting unit to the reporting unit's assets and liabilities. As a result of this allocation, the Company estimated that the implied fair value of the oilfield reporting unit's goodwill was \$0. As such, the entire oilfield reporting unit's goodwill balance of \$13 was impaired during the third quarter of 2017, and the Company recognized a goodwill impairment charge of \$13 in its Epoxy, Phenolic and Coating Resins segment, which is included in "Asset impairments" in the unaudited Condensed Consolidated Statements of Operations. Significant unobservable inputs in the discounted cash flow analysis included projected long-term future cash flows, projected growth rates and discount rates associated with this reporting unit. Future projected long-term cash flows and growth rates were derived from models based upon forecasts prepared by the Company's management. These projected cash flows were discounted using a rate of 13.5%.

Non-derivative Financial Instruments

The following table summarizes the carrying amount and fair value of the Company's non-derivative financial instruments:

| | Carrying Amount | Fair Value | | | Total |
|---------------------------|--------------------|------------|----------|---------|----------|
| | | Level 1 | Level 2 | Level 3 | |
| September 30, 2017 | | | | | |
| Debt | \$ 3,777 | \$ — | \$ 3,205 | \$ 31 | \$ 3,236 |
| December 31, 2016 | | | | | |
| Debt | \$ 3,542 | \$ — | \$ 3,134 | \$ 9 | \$ 3,143 |

Fair values of debt classified as Level 2 are determined based on other similar financial instruments, or based upon interest rates that are currently available to the Company for the issuance of debt with similar terms and maturities. Level 3 amounts represent capital leases whose fair value is determined through the use of present value and specific contract terms. The carrying amount and fair value of the Company's debt is exclusive of unamortized deferred financing fees. The carrying amounts of cash and cash equivalents, short term investments, accounts receivable, accounts payable and other accrued liabilities are considered reasonable estimates of their fair values due to the short-term maturity of these financial instruments.

6. Debt Obligations

Debt outstanding at September 30, 2017 and December 31, 2016 is as follows:

| | September 30, 2017 | | December 31, 2016 | |
|--|--------------------|---------------------|-------------------|---------------------|
| | Long-Term | Due Within One Year | Long-Term | Due Within One Year |
| ABL Facility | \$ 124 | \$ — | \$ — | \$ — |
| Senior Secured Notes: | | | | |
| 6.625% First-Priority Senior Secured Notes due 2020 (includes \$2 and \$3 of unamortized debt premium at September 30, 2017 and December 31, 2016, respectively) | 1,552 | — | 1,553 | — |
| 10.00% First-Priority Senior Secured Notes due 2020 | 315 | — | 315 | — |
| 10.375% First-Priority Senior Secured Notes due 2022 | 560 | — | — | — |
| 8.875% Senior Secured Notes due 2018 (includes \$1 of unamortized debt discount at December 31, 2016) | — | — | 706 | — |
| 13.75% Senior Secured Notes due 2022 | 225 | — | — | — |
| 9.00% Second-Priority Senior Secured Notes due 2020 | 574 | — | 574 | — |
| Debentures: | | | | |
| 9.2% debentures due 2021 | 74 | — | 74 | — |
| 7.875% debentures due 2023 | 189 | — | 189 | — |
| Other Borrowings: | | | | |
| Australia Facility due 2017 | — | 55 | — | 51 |
| Brazilian bank loans | 11 | 29 | 14 | 26 |
| Lease obligations | 27 | 4 | 7 | 2 |
| Other | 5 | 33 | 3 | 28 |
| Unamortized debt issuance costs | (44) | — | (38) | — |
| Total | \$ 3,612 | \$ 121 | \$ 3,397 | \$ 107 |

2017 Refinancing Transactions

- In February 2017, the Company issued \$485 aggregate principal amount of 10.375% First-Priority Senior Secured Notes due 2022 (the “New First Lien Notes”) and \$225 aggregate principal amount of 13.75% Senior Secured Notes due 2022 (the “New Senior Secured Notes”). Upon the closing of these offerings, the Company used the net proceeds from these offerings, together with cash on its balance sheet, to redeem all of the Company’s outstanding 8.875% Senior Secured Notes due 2018 (the “Old Senior Secured Notes”), which occurred in March 2017. In connection with the extinguishment of the Old Senior Secured Notes, the Company wrote off \$3 of unamortized deferred debt issuance costs and discounts, which are included in “(Gain) loss on extinguishment of debt” in the unaudited Condensed Consolidated Statements of Operations.
- In May 2017, the Company issued an additional \$75 aggregate principal amount of New First Lien Notes at an issue price of 100.5%. These notes mature on February 1, 2022 and have the same terms as the New First Lien Notes issued in February 2017. The Company used the net proceeds from these notes for general corporate purposes.
- The Company also amended and restated its ABL Facility in December 2016 with modifications to, among other things, permit the refinancing of the Old Senior Secured Notes. In connection with the issuance of the new notes in February 2017, certain lenders under the ABL Facility provided extended revolving credit facility commitments in an aggregate principal amount of \$350 with a maturity date of December 5, 2021 (subject to certain early maturity triggers), the existing commitments were terminated and the size of the ABL Facility was reduced from \$400 to \$350.

These transactions are collectively referred to as the “2017 Refinancing Transactions.”

7. Commitments and Contingencies

Environmental Matters

The Company’s operations involve the use, handling, processing, storage, transportation and disposal of hazardous materials. The Company is subject to extensive environmental regulation at the federal, state and local levels as well as foreign laws and regulations, and is therefore exposed to the risk of claims for environmental remediation or restoration. In addition, violations of environmental laws or permits may result in restrictions being imposed on operating activities, substantial fines, penalties, damages or other costs, any of which could have a material adverse effect on the Company’s business, financial condition, results of operations or cash flows.

Environmental Institution of Paraná IAP—On August 10, 2005, the Environmental Institute of Paraná (IAP), an environmental agency in the State of Paraná, provided Hexion Química Industria, the Company’s Brazilian subsidiary, with notice of an environmental assessment in the amount of 12 Brazilian reais. The assessment related to alleged environmental damages to the Paranaguá Bay caused in November 2004 from an explosion on a shipping vessel carrying methanol purchased by the Company. The investigations performed by the public authorities have not identified any actions of the Company that contributed to or caused the accident. The Company responded to the assessment by filing a request to have it cancelled and by obtaining an injunction precluding execution of the assessment pending adjudication of the issue. In November 2010, the Court denied the Company’s request to cancel the assessment and lifted the injunction that had been issued. The Company responded to the ruling by filing an appeal in the State of Paraná Court of Appeals. In March 2012, the Company was informed that the Court of Appeals had denied the Company’s appeal, and on June 4, 2012 the Company filed appeals to the Superior Court of Justice and the Supreme Court of Brazil. In September 2016, the Superior Court of Justice decided that strict liability does not apply to administrative fines issued by environmental agencies and reversed the decision of the State of Paraná Court of Appeals. The Superior Court of Justice remanded the case back to the Court of Appeals to determine if the IAP met its burden of proving negligence by the Company. In September 2017, the State of Paraná Court of Appeals decided that IAP did not prove that the Company was negligent and granted the Company’s request to annul the environmental assessment. IAP filed a motion for clarification regarding the Court of Appeals’ analysis of the case and the Company filed a motion for clarification regarding attorney fees. After the pending motions are resolved, IAP will have 15 business days to file an appeal with the Superior Court of Justice. The Company does not believe that a loss is probable. At September 30, 2017, the amount of the assessment, including tax, penalties, monetary correction and interest, is 55 Brazilian reais, or approximately \$17.

The following table summarizes all probable environmental remediation, indemnification and restoration liabilities, including related legal expenses, at September 30, 2017 and December 31, 2016:

| Site Description | Liability | | Range of Reasonably Possible Costs at September 30, 2017 | |
|--|--------------------|-------------------|--|--------------|
| | September 30, 2017 | December 31, 2016 | Low | High |
| Geismar, LA | \$ 14 | \$ 14 | \$ 9 | \$ 22 |
| Superfund and offsite landfills – allocated share: | | | | |
| Less than 1% | 2 | 2 | 1 | 4 |
| Equal to or greater than 1% | 7 | 6 | 5 | 14 |
| Currently-owned | 4 | 4 | 3 | 9 |
| Formerly-owned: | | | | |
| Remediation | 27 | 30 | 25 | 42 |
| Monitoring only | — | 1 | — | 1 |
| Total | \$ 54 | \$ 57 | \$ 43 | \$ 92 |

These amounts include estimates for unasserted claims that the Company believes are probable of loss and reasonably estimable. The estimate of the range of reasonably possible costs is less certain than the estimates upon which the liabilities are based. To establish the upper end of a range, assumptions less favorable to the Company among the range of reasonably possible outcomes were used. As with any estimate, if facts or circumstances change, the final outcome could differ materially from these estimates. At September 30, 2017 and December 31, 2016, \$14 and \$13, respectively, have been included in “Other current liabilities” in the unaudited Condensed Consolidated Balance Sheets, with the remaining amount included in “Other long-term liabilities.”

Following is a discussion of the Company’s environmental liabilities and the related assumptions at September 30, 2017:

Geismar, LA Site—The Company formerly owned a basic chemicals and polyvinyl chloride business that was taken public as Borden Chemicals and Plastics Operating Limited Partnership (“BCPOLP”) in 1987. The Company retained a 1% interest, the general partner interest and the liability for certain environmental matters after BCPOLP’s formation. Under a Settlement Agreement approved by the United States Bankruptcy Court for the District of Delaware among the Company, BCPOLP, the United States Environmental Protection Agency and the Louisiana Department of Environmental Quality, the Company agreed to perform certain tasks related to BCPOLP’s obligations for soil and groundwater contamination at BCPOLP’s Geismar, Louisiana site. The Company bears the sole responsibility for these obligations because there are no other potentially responsible parties (“PRP”) or third parties from whom the Company could seek reimbursement.

A groundwater pump and treat system to remove contaminants is operational, and natural attenuation studies are proceeding. If closure procedures and remediation systems prove to be inadequate, or if additional contamination is discovered, costs that would approach the higher end of the range of possible outcomes could result.

Due to the long-term nature of the project, the reliability of timing and the ability to estimate remediation payments, a portion of this liability was recorded at its net present value, assuming a 3% discount rate and a time period of 22 years. The range of possible outcomes is discounted in a similar manner. The undiscounted liability, which is expected to be paid over the next 22 years, is approximately \$20. Over the next five years, the Company expects to make ratable payments totaling \$6.

Superfund Sites and Offsite Landfills—The Company is currently involved in environmental remediation activities at a number of sites for which it has been notified that it is, or may be, a PRP under the United States Comprehensive Environmental Response, Compensation and Liability Act or similar state “superfund” laws. The Company anticipates approximately 50% of the estimated liability for these sites will be paid within the next five years, with the remainder over the next twenty-five years. The Company generally does not bear a significant level of responsibility for these sites, and as a result, has little control over the costs and timing of cash flows.

The Company’s ultimate liability will depend on many factors including its share of waste volume, the financial viability of other PRPs, the remediation methods and technology used, the amount of time necessary to accomplish remediation and the availability of insurance coverage. The range of possible outcomes takes into account the maturity of each project, resulting in a more narrow range as the project progresses. To estimate both its current reserves for environmental remediation at these sites and the possible range of additional costs, the Company has not assumed that it will bear the entire cost of remediation of every site to the exclusion of other known PRPs who may be jointly and severally liable. The Company has limited information to assess the viability of other PRPs and their probable contribution on a per site basis. The Company’s insurance provides very limited, if any, coverage for these environmental matters.

Sites Under Current Ownership—The Company is conducting environmental remediation at a number of locations that it currently owns, of which ten sites are no longer in operation. As the Company is performing a portion of the remediation on a voluntary basis, it has some control over the costs to be incurred and the timing of cash flows. The Company expects to pay approximately \$4 of these liabilities within the next five years, with the remainder over the next ten years. The factors influencing the ultimate outcome include the methods of remediation elected, the conclusions and assessment of site studies remaining to be completed, and the time period required to complete the work. No other parties are responsible for remediation at these sites.

Formerly-Owned Sites—The Company is conducting, or has been identified as a PRP in connection with, environmental remediation at a number of locations that it formerly owned and/or operated. Remediation costs at these former sites, such as those associated with our former phosphate mining and processing operations, could be material. The Company has accrued those costs for formerly-owned sites which are currently probable and reasonably estimable. One such site is the Coronet Industries, Inc. Superfund Alternative Site in Plant City, Florida. The Company entered into a settlement agreement effective February 1, 2016 with Coronet Industries and another former site owner. Pursuant to the agreement, the Company agreed to pay \$10 in fulfillment of the contribution claim against the Company for past remediation costs, payable in three annual installments, of which one installment remains to be paid in 2018. Additionally, the Company accepted a 40% allocable share of specified future remediation costs at this site. The Company estimates its allocable share of future remediation costs to be approximately \$15. The final costs to the Company will depend on the method of remediation chosen, the amount of time necessary to accomplish remediation and the ongoing financial viability of the other PRPs. Currently, the Company has insufficient information to estimate the range of reasonably possible costs related to this site.

Monitoring Only Sites—The Company is responsible for a number of sites that require monitoring where no additional remediation is expected. The Company has established reserves for costs related to these sites. Payment of these liabilities is anticipated to occur over the next ten or more years. The ultimate cost to the Company will be influenced by fluctuations in projected monitoring periods or by findings that are different than anticipated.

Indemnifications—In connection with the acquisition of certain of the Company’s operating businesses, the Company has been indemnified by the sellers against certain liabilities of the acquired businesses, including liabilities relating to both known and unknown environmental contamination arising prior to the date of the purchase. The indemnifications may be subject to certain exceptions and limitations, deductibles and indemnity caps. While it is reasonably possible that some costs could be incurred, except for those sites identified above, the Company has inadequate information to allow it to estimate a potential range of liability, if any.

Non-Environmental Legal Matters

The Company is involved in various legal proceedings in the ordinary course of business and had reserves of \$4 and \$2 at September 30, 2017 and December 31, 2016, respectively, for all non-environmental legal defense costs incurred and settlement costs that it believes are probable and estimable. At September 30, 2017 and December 31, 2016, \$3 and \$1, respectively, has been included in “Other current liabilities” in the unaudited Condensed Consolidated Balance Sheets, with the remaining amount included in “Other long-term liabilities.”

The Company is also involved in various product liability, commercial and employment litigation, personal injury, property damage and other legal proceedings, including actions that allege harm caused by products the Company has allegedly made or used, containing silica, vinyl chloride monomer and asbestos. The Company believes it has adequate reserves and that it is not reasonably possible that a loss exceeding amounts already reserved would be material. Furthermore, the Company has insurance to cover claims of these types.

8. Pension and Postretirement Benefit Plans

Following are the components of net pension and postretirement (benefit) expense recognized by the Company for the three and nine months ended September 30, 2017 and 2016:

| | Pension Benefits | | | | Non-Pension Postretirement Benefits | | | |
|---|----------------------------------|----------------|------------|----------------|-------------------------------------|----------------|------------|----------------|
| | Three Months Ended September 30, | | | | Three Months Ended September 30, | | | |
| | 2017 | | 2016 | | 2017 | | 2016 | |
| | U.S. Plans | Non-U.S. Plans | U.S. Plans | Non-U.S. Plans | U.S. Plans | Non-U.S. Plans | U.S. Plans | Non-U.S. Plans |
| Service cost | \$ 1 | \$ 4 | \$ 1 | \$ 4 | \$ — | \$ — | \$ — | \$ — |
| Interest cost on projected benefit obligation | 2 | 3 | 2 | 3 | — | — | — | — |
| Expected return on assets | (3) | (3) | (4) | (3) | — | — | — | — |
| Net expense (benefit) | \$ — | \$ 4 | \$ (1) | \$ 4 | \$ — | \$ — | \$ — | \$ — |

| | Pension Benefits | | | | Non-Pension Postretirement Benefits | | | |
|---|---------------------------------|----------------|------------|----------------|-------------------------------------|----------------|------------|----------------|
| | Nine Months Ended September 30, | | | | Nine Months Ended September 30, | | | |
| | 2017 | | 2016 | | 2017 | | 2016 | |
| | U.S. Plans | Non-U.S. Plans | U.S. Plans | Non-U.S. Plans | U.S. Plans | Non-U.S. Plans | U.S. Plans | Non-U.S. Plans |
| Service cost | \$ 2 | \$ 12 | \$ 3 | \$ 11 | \$ — | \$ — | \$ — | \$ — |
| Interest cost on projected benefit obligation | 6 | 7 | 6 | 8 | — | 1 | — | 1 |
| Expected return on assets | (10) | (8) | (11) | (8) | — | — | — | — |
| Amortization of prior service benefit | — | — | — | — | — | — | (1) | — |
| Net (benefit) expense | \$ (2) | \$ 11 | \$ (2) | \$ 11 | \$ — | \$ 1 | \$ (1) | \$ 1 |

9. Segment Information

The Company's business segments are based on the products that the Company offers and the markets that it serves. At September 30, 2017, the Company had two reportable segments: Epoxy, Phenolic and Coating Resins and Forest Products Resins. A summary of the major products of the Company's reportable segments follows:

- **Epoxy, Phenolic and Coating Resins:** epoxy specialty resins, phenolic encapsulated substrates, versatic acids and derivatives, basic epoxy resins and intermediates and phenolic specialty resins and molding compounds
- **Forest Products Resins:** forest products resins and formaldehyde applications

Reportable Segments

Following are net sales and Segment EBITDA (earnings before interest, income taxes, depreciation and amortization) by reportable segment. Segment EBITDA is defined as EBITDA adjusted for certain non-cash items and other income and expenses. Segment EBITDA is the primary performance measure used by the Company's senior management, the chief operating decision-maker and the board of directors to evaluate operating results and allocate capital resources among segments. Segment EBITDA is also the profitability measure used to set management and executive incentive compensation goals. Corporate and Other is primarily corporate general and administrative expenses that are not allocated to the segments, such as shared service and administrative functions, foreign exchange gains and losses and legacy company costs not allocated to continuing segments.

Net Sales ⁽¹⁾:

| | Three Months Ended September 30, | | Nine Months Ended September 30. | |
|------------------------------------|----------------------------------|---------------|---------------------------------|-----------------|
| | 2017 | 2016 | 2017 | 2016 |
| Epoxy, Phenolic and Coating Resins | \$ 528 | \$ 476 | \$ 1,537 | \$ 1,664 |
| Forest Products Resins | 386 | 343 | 1,159 | 1,016 |
| Total | \$ 914 | \$ 819 | \$ 2,696 | \$ 2,680 |

(1) Intersegment sales are not significant and, as such, are eliminated within the selling segment.

Reconciliation of Net (Loss) Income to Segment EBITDA:

| | Three Months Ended September 30, | | Nine Months Ended September 30, | |
|---|----------------------------------|---------------|---------------------------------|---------------|
| | 2017 | 2016 | 2017 | 2016 |
| Reconciliation: | | | | |
| Net (loss) income | \$ (70) | \$ (47) | \$ (146) | \$ 59 |
| Income tax expense | 9 | 16 | 16 | 40 |
| Interest expense, net | 82 | 76 | 247 | 235 |
| Depreciation and amortization | 29 | 30 | 85 | 101 |
| Accelerated depreciation | 14 | 21 | 14 | 127 |
| EBITDA | \$ 64 | \$ 96 | \$ 216 | \$ 562 |
| Items not included in Segment EBITDA: | | | | |
| Asset impairments | \$ 13 | \$ — | \$ 13 | \$ — |
| Business realignment costs (income) | 10 | (3) | 27 | 42 |
| Gain on dispositions | — | — | — | (240) |
| Realized and unrealized foreign currency (gains) losses | (5) | 6 | (7) | (3) |
| (Gain) loss on extinguishment of debt | — | (3) | 3 | (47) |
| Other | 14 | 16 | 39 | 50 |
| Total adjustments | 32 | 16 | 75 | (198) |
| Segment EBITDA | \$ 96 | \$ 112 | \$ 291 | \$ 364 |
| Segment EBITDA: | | | | |
| Epoxy, Phenolic and Coating Resins | \$ 45 | \$ 64 | \$ 143 | \$ 230 |
| Forest Products Resins | 66 | 65 | 195 | 184 |
| Corporate and Other | (15) | (17) | (47) | (50) |
| Total | \$ 96 | \$ 112 | \$ 291 | \$ 364 |

Items Not Included in Segment EBITDA

Not included in Segment EBITDA are certain non-cash items and other income and expenses. For the three and nine months ended September 30, 2017 and 2016, these items primarily include expenses from retention programs and certain professional fees related to strategic projects. Business realignment costs for the three and nine months ended September 30, 2017 primarily include costs related to certain in-process facility rationalizations and cost reduction programs. Business realignment costs for the three and nine months ended September 30, 2016 primarily include costs related to the planned facility rationalizations within the Epoxy, Phenolic and Coating Resins segment and costs related to certain in-process cost reduction programs.

10. Changes in Accumulated Other Comprehensive Loss

Following is a summary of changes in “Accumulated other comprehensive loss” for the three and nine months ended September 30, 2017 and 2016:

| | Three Months Ended September 30, 2017 | | | Three Months Ended September 30, 2016 | | |
|---|--|--|---------|--|--|---------|
| | Defined Benefit Pension and Postretirement Plans | Foreign Currency Translation Adjustments | Total | Defined Benefit Pension and Postretirement Plans | Foreign Currency Translation Adjustments | Total |
| Beginning balance | \$ 3 | \$ (27) | \$ (24) | \$ 3 | \$ (18) | \$ (15) |
| Other comprehensive income before reclassifications, net of tax | — | 10 | 10 | — | 7 | 7 |
| Ending balance | \$ 3 | \$ (17) | \$ (14) | \$ 3 | \$ (11) | \$ (8) |

| | Nine Months Ended September 30, 2017 | | | Nine Months Ended September 30, 2016 | | |
|--|--|--|---------|--|--|---------|
| | Defined Benefit Pension and Postretirement Plans | Foreign Currency Translation Adjustments | Total | Defined Benefit Pension and Postretirement Plans | Foreign Currency Translation Adjustments | Total |
| Beginning balance | \$ 3 | \$ (42) | \$ (39) | \$ 4 | \$ (19) | \$ (15) |
| Other comprehensive income (loss) before reclassifications, net of tax | — | 25 | 25 | (1) | 8 | 7 |
| Ending balance | \$ 3 | \$ (17) | \$ (14) | \$ 3 | \$ (11) | \$ (8) |

11. Income Taxes

The effective tax rate was (15)% and (53)% for the three months ended September 30, 2017 and 2016, respectively. The effective tax rate was (12)% and 44% for the nine months ended September 30, 2017 and 2016, respectively. The change in the effective tax rate was primarily attributable to the amount and distribution of income and losses among the various jurisdictions in which we operate. The effective tax rates were also impacted by operating gains and losses generated in jurisdictions where no tax expense or benefit was recognized due to the maintenance of a full valuation allowance.

For the three and nine months ended September 30, 2017 and 2016, income tax expense relates primarily to income from certain foreign operations. In 2017, losses in the United States and certain foreign jurisdictions had no impact on income tax expense as no tax benefit was recognized due to the maintenance of a full valuation allowance. In 2016, the income tax expense related to the gain on dispositions was substantially reduced by net operating loss utilization which was offset by a decrease to the respective valuation allowances.

12. Guarantor/Non-Guarantor Subsidiary Financial Information

The Company’s 6.625% First-Priority Senior Secured Notes due 2020, 10.00% First-Priority Senior Secured Notes due 2020, 10.375% First-Priority Senior Secured Notes due 2022, 13.75% Senior Secured Notes due 2022 and 9.00% Second-Priority Senior Secured Notes due 2020 are guaranteed by certain of its U.S. subsidiaries.

The following information contains the condensed consolidating financial information for Hexion Inc. (the parent), the combined subsidiary guarantors (Hexion Investments Inc.; Lawter International, Inc.; HSC Capital Corporation (dissolved in April 2017); Hexion International Inc.; Hexion CI Holding Company (China) LLC; NL COOP Holdings LLC and Oilfield Technology Group, Inc. (dissolved in September 2017)) and the combined non-guarantor subsidiaries, which includes all of the Company’s foreign subsidiaries.

All of the subsidiary guarantors are 100% owned by Hexion Inc. All guarantees are full and unconditional, and are joint and several. There are no significant restrictions on the ability of the Company to obtain funds from its domestic subsidiaries by dividend or loan. While the Company’s Australian, New Zealand, Brazilian and China subsidiaries contain certain restrictions related to the payment of dividends and intercompany loans due to the terms of their credit facilities, there are no material restrictions on the Company’s ability to obtain cash from the remaining non-guarantor subsidiaries.

These financial statements are prepared on the same basis as the consolidated financial statements of the Company except that investments in subsidiaries are accounted for using the equity method for purposes of the consolidating presentation. The principal elimination entries relate to investments in subsidiaries and intercompany balances and transactions.

This information includes allocations of corporate overhead to the combined non-guarantor subsidiaries based on net sales. Income tax expense has been provided on the combined non-guarantor subsidiaries based on actual effective tax rates.

HEXION INC.
 SEPTEMBER 30, 2017
 CONDENSED CONSOLIDATING BALANCE SHEET (Unaudited)

| | Hexion Inc. | Combined Subsidiary Guarantors | Combined Non-Guarantor Subsidiaries | Eliminations | Consolidated |
|---|----------------|--------------------------------------|---|--------------|--------------|
| Assets | | | | | |
| Current assets: | | | | | |
| Cash and cash equivalents (including restricted cash of \$0 and \$18, respectively) | \$ 6 | \$ — | \$ 112 | \$ — | \$ 118 |
| Accounts receivable, net | 131 | 2 | 367 | — | 500 |
| Intercompany accounts receivable | 104 | — | 22 | (126) | — |
| Intercompany loans receivable - current portion | 9 | — | — | (9) | — |
| Inventories: | | | | | |
| Finished and in-process goods | 87 | — | 153 | — | 240 |
| Raw materials and supplies | 35 | — | 57 | — | 92 |
| Other current assets | 16 | — | 33 | — | 49 |
| Total current assets | 388 | 2 | 744 | (135) | 999 |
| Investment in unconsolidated entities | 146 | 13 | 20 | (159) | 20 |
| Deferred income taxes | 1 | — | 11 | — | 12 |
| Other assets, net | 16 | 6 | 27 | — | 49 |
| Intercompany loans receivable | 1,110 | — | 208 | (1,318) | — |
| Property and equipment, net | 416 | — | 502 | — | 918 |
| Goodwill | 52 | — | 61 | — | 113 |
| Other intangible assets, net | 35 | — | 10 | — | 45 |
| Total assets | \$ 2,164 | \$ 21 | \$ 1,583 | \$ (1,612) | \$ 2,156 |
| Liabilities and Deficit | | | | | |
| Current liabilities: | | | | | |
| Accounts payable | \$ 109 | \$ — | \$ 238 | \$ — | \$ 347 |
| Intercompany accounts payable | 22 | — | 104 | (126) | — |
| Debt payable within one year | 10 | — | 111 | — | 121 |
| Intercompany loans payable within one year | — | — | 9 | (9) | — |
| Interest payable | 99 | — | 2 | — | 101 |
| Income taxes payable | 8 | — | 5 | — | 13 |
| Accrued payroll and incentive compensation | 10 | — | 37 | — | 47 |
| Other current liabilities | 69 | — | 57 | — | 126 |
| Total current liabilities | 327 | — | 563 | (135) | 755 |
| Long-term liabilities: | | | | | |
| Long-term debt | 3,528 | — | 84 | — | 3,612 |
| Intercompany loans payable | 208 | — | 1,110 | (1,318) | — |
| Accumulated losses of unconsolidated subsidiaries in excess of investment | 614 | 159 | — | (773) | — |
| Long-term pension and post employment benefit obligations | 39 | — | 224 | — | 263 |
| Deferred income taxes | 2 | — | 11 | — | 13 |
| Other long-term liabilities | 105 | — | 68 | — | 173 |
| Total liabilities | 4,823 | 159 | 2,060 | (2,226) | 4,816 |
| Total Hexion Inc. shareholder's deficit | (2,659) | (138) | (476) | 614 | (2,659) |
| Noncontrolling interest | — | — | (1) | — | (1) |
| Total deficit | (2,659) | (138) | (477) | 614 | (2,660) |
| Total liabilities and deficit | \$ 2,164 | \$ 21 | \$ 1,583 | \$ (1,612) | \$ 2,156 |

HEXION INC.
DECEMBER 31, 2016
CONDENSED CONSOLIDATING BALANCE SHEET

| | Hexion Inc. | Combined Subsidiary Guarantors | Combined Non-Guarantor Subsidiaries | Eliminations | Consolidated |
|---|-----------------|--------------------------------------|---|-------------------|-----------------|
| Assets | | | | | |
| Current assets: | | | | | |
| Cash and cash equivalents (including restricted cash of \$0 and \$17, respectively) | \$ 28 | \$ — | \$ 168 | \$ — | \$ 196 |
| Accounts receivable, net | 119 | 1 | 270 | — | 390 |
| Intercompany accounts receivable | 106 | — | 60 | (166) | — |
| Intercompany loans receivable - current portion | — | — | 175 | (175) | — |
| Inventories: | | | | | |
| Finished and in-process goods | 82 | — | 117 | — | 199 |
| Raw materials and supplies | 31 | — | 57 | — | 88 |
| Other current assets | 26 | — | 19 | — | 45 |
| Total current assets | <u>392</u> | <u>1</u> | <u>866</u> | <u>(341)</u> | <u>918</u> |
| Investment in unconsolidated entities | 93 | 13 | 18 | (106) | 18 |
| Deferred income taxes | — | — | 10 | — | 10 |
| Other long-term assets | 17 | 6 | 20 | — | 43 |
| Intercompany loans receivable | 1,050 | — | 180 | (1,230) | — |
| Property and equipment, net | 448 | — | 445 | — | 893 |
| Goodwill | 65 | — | 56 | — | 121 |
| Other intangible assets, net | 41 | — | 11 | — | 52 |
| Total assets | <u>\$ 2,106</u> | <u>\$ 20</u> | <u>\$ 1,606</u> | <u>\$ (1,677)</u> | <u>\$ 2,055</u> |
| Liabilities and Deficit | | | | | |
| Current liabilities: | | | | | |
| Accounts payable | \$ 142 | \$ — | \$ 226 | \$ — | \$ 368 |
| Intercompany accounts payable | 60 | — | 106 | (166) | — |
| Debt payable within one year | 6 | — | 101 | — | 107 |
| Intercompany loans payable within one year | 175 | — | — | (175) | — |
| Interest payable | 69 | — | 1 | — | 70 |
| Income taxes payable | 6 | — | 7 | — | 13 |
| Accrued payroll and incentive compensation | 28 | — | 27 | — | 55 |
| Other current liabilities | 110 | — | 49 | — | 159 |
| Total current liabilities | <u>596</u> | <u>—</u> | <u>517</u> | <u>(341)</u> | <u>772</u> |
| Long term liabilities: | | | | | |
| Long-term debt | 3,378 | — | 19 | — | 3,397 |
| Intercompany loans payable | 180 | — | 1,050 | (1,230) | — |
| Accumulated losses of unconsolidated subsidiaries in excess of investment | 339 | 106 | — | (445) | — |
| Long-term pension and post employment benefit obligations | 42 | — | 204 | — | 246 |
| Deferred income taxes | 4 | — | 9 | — | 13 |
| Other long-term liabilities | 105 | — | 61 | — | 166 |
| Total liabilities | <u>4,644</u> | <u>106</u> | <u>1,860</u> | <u>(2,016)</u> | <u>4,594</u> |
| Total Hexion Inc. shareholder's deficit | (2,538) | (86) | (253) | 339 | (2,538) |
| Noncontrolling interest | — | — | (1) | — | (1) |
| Total deficit | <u>(2,538)</u> | <u>(86)</u> | <u>(254)</u> | <u>339</u> | <u>(2,539)</u> |
| Total liabilities and deficit | <u>\$ 2,106</u> | <u>\$ 20</u> | <u>\$ 1,606</u> | <u>\$ (1,677)</u> | <u>\$ 2,055</u> |

HEXION INC.
THREE MONTHS ENDED SEPTEMBER 30, 2017
CONDENSED CONSOLIDATING STATEMENT OF OPERATIONS (Unaudited)

| | Hexion Inc. | Combined Subsidiary Guarantors | Combined Non-Guarantor Subsidiaries | Eliminations | Consolidated |
|--|----------------|--------------------------------------|---|--------------|--------------|
| Net sales | \$ 400 | \$ — | \$ 558 | \$ (44) | \$ 914 |
| Cost of sales | 360 | — | 481 | (44) | 797 |
| Gross profit | 40 | — | 77 | — | 117 |
| Selling, general and administrative expense | 28 | — | 47 | — | 75 |
| Asset impairments | 13 | — | — | — | 13 |
| Business realignment costs | 6 | — | 4 | — | 10 |
| Other operating expense (income), net | 3 | — | (2) | — | 1 |
| Operating (loss) income | (10) | — | 28 | — | 18 |
| Interest expense, net | 78 | — | 4 | — | 82 |
| Intercompany interest (income) expense, net | (20) | — | 20 | — | — |
| Other non-operating (income) expense, net | (24) | — | 21 | — | (3) |
| Loss before tax and (losses) earnings from unconsolidated entities | (44) | — | (17) | — | (61) |
| Income tax expense | 3 | — | 6 | — | 9 |
| Loss before (losses) earnings from unconsolidated entities | (47) | — | (23) | — | (70) |
| (Losses) earnings from unconsolidated entities, net of taxes | (23) | (18) | 1 | 40 | — |
| Net loss | \$ (70) | \$ (18) | \$ (22) | \$ 40 | \$ (70) |
| Comprehensive loss | \$ (60) | \$ (18) | \$ (22) | \$ 40 | \$ (60) |

HEXION INC.
THREE MONTHS ENDED SEPTEMBER 30, 2016
CONDENSED CONSOLIDATING STATEMENT OF OPERATIONS (Unaudited)

| | Hexion Inc. | Combined Subsidiary Guarantors | Combined Non-Guarantor Subsidiaries | Eliminations | Consolidated |
|--|----------------|--------------------------------------|---|----------------|----------------|
| Net sales | \$ 356 | \$ — | \$ 507 | \$ (44) | \$ 819 |
| Cost of sales | 325 | — | 420 | (44) | 701 |
| Gross profit | 31 | — | 87 | — | 118 |
| Selling, general and administrative expense | 30 | — | 39 | — | 69 |
| Business realignment (income) costs | (7) | — | 4 | — | (3) |
| Other operating expense (income), net | 10 | 6 | (9) | — | 7 |
| Operating (loss) income | (2) | (6) | 53 | — | 45 |
| Interest expense, net | 74 | — | 2 | — | 76 |
| Intercompany interest (income) expense, net | (18) | — | 18 | — | — |
| Gain on extinguishment of debt | (3) | — | — | — | (3) |
| Other non-operating (income) expense, net | (5) | — | 7 | — | 2 |
| (Loss) income before income tax and earnings (losses) from unconsolidated entities | (50) | (6) | 26 | — | (30) |
| Income tax expense | 9 | — | 7 | — | 16 |
| (Loss) income before earnings (losses) from unconsolidated entities | (59) | (6) | 19 | — | (46) |
| Earnings (losses) from unconsolidated entities, net of taxes | 12 | (1) | — | (12) | (1) |
| Net (loss) income | <u>\$ (47)</u> | <u>\$ (7)</u> | <u>\$ 19</u> | <u>\$ (12)</u> | <u>\$ (47)</u> |
| Comprehensive (loss) income | <u>\$ (40)</u> | <u>\$ (7)</u> | <u>\$ 26</u> | <u>\$ (19)</u> | <u>\$ (40)</u> |

HEXION INC.
NINE MONTHS ENDED SEPTEMBER 30, 2017
CONDENSED CONSOLIDATING STATEMENT OF OPERATIONS (Unaudited)

| | Hexion Inc. | Combined Subsidiary Guarantors | Combined Non-Guarantor Subsidiaries | Eliminations | Consolidated |
|--|----------------|--------------------------------------|---|--------------|--------------|
| Net sales | \$ 1,195 | \$ — | \$ 1,651 | \$ (150) | \$ 2,696 |
| Cost of sales | 1,037 | — | 1,425 | (150) | 2,312 |
| Gross profit | 158 | — | 226 | — | 384 |
| Selling, general and administrative expense | 91 | — | 136 | — | 227 |
| Asset impairments | 13 | — | — | — | 13 |
| Business realignment costs | 16 | — | 11 | — | 27 |
| Other operating expense, net | — | — | 4 | — | 4 |
| Operating income | 38 | — | 75 | — | 113 |
| Interest expense, net | 236 | — | 11 | — | 247 |
| Intercompany interest (income) expense, net | (55) | — | 55 | — | — |
| Loss on extinguishment of debt | 3 | — | — | — | 3 |
| Other non-operating (income) expense, net | (78) | — | 74 | — | (4) |
| Loss before tax and (losses) earnings from unconsolidated entities | (68) | — | (65) | — | (133) |
| Income tax (benefit) expense | (1) | — | 17 | — | 16 |
| Loss before (losses) earnings from unconsolidated entities | (67) | — | (82) | — | (149) |
| (Losses) earnings from unconsolidated entities, net of taxes | (79) | (52) | 3 | 131 | 3 |
| Net loss | \$ (146) | \$ (52) | \$ (79) | \$ 131 | \$ (146) |
| Comprehensive loss | \$ (121) | \$ (52) | \$ (71) | \$ 123 | \$ (121) |

HEXION INC.
NINE MONTHS ENDED SEPTEMBER 30, 2016
CONDENSED CONSOLIDATING STATEMENT OF OPERATIONS (Unaudited)

| | Hexion Inc. | Combined Subsidiary Guarantors | Combined Non-Guarantor Subsidiaries | Eliminations | Consolidated |
|---|----------------|--------------------------------------|---|--------------|--------------|
| Net sales | \$ 1,119 | \$ — | \$ 1,701 | \$ (140) | \$ 2,680 |
| Cost of sales | 1,080 | — | 1,417 | (140) | 2,357 |
| Gross profit | 39 | — | 284 | — | 323 |
| Selling, general and administrative expense | 109 | — | 126 | — | 235 |
| Gain on dispositions | (188) | — | (52) | — | (240) |
| Business realignment costs | 31 | — | 11 | — | 42 |
| Other operating expense (income), net | 14 | 6 | (14) | — | 6 |
| Operating income (loss) | 73 | (6) | 213 | — | 280 |
| Interest expense, net | 227 | — | 8 | — | 235 |
| Intercompany interest (income) expense, net | (55) | — | 55 | — | — |
| Gain on extinguishment of debt | (47) | — | — | — | (47) |
| Other non-operating (income) expense, net | (16) | — | 17 | — | 1 |
| (Loss) income before income tax and earnings from unconsolidated entities | (36) | (6) | 133 | — | 91 |
| Income tax expense | 5 | — | 35 | — | 40 |
| (Loss) income before earnings from unconsolidated entities | (41) | (6) | 98 | — | 51 |
| Earnings from unconsolidated entities, net of taxes | 100 | 45 | 2 | (139) | 8 |
| Net income | \$ 59 | \$ 39 | \$ 100 | \$ (139) | \$ 59 |
| Comprehensive income | \$ 66 | \$ 39 | \$ 100 | \$ (139) | \$ 66 |

HEXION INC.
NINE MONTHS ENDED SEPTEMBER 30, 2017
CONDENSED CONSOLIDATING STATEMENT OF CASH FLOWS (Unaudited)

| | Hexion Inc. | Combined Subsidiary Guarantors | Combined Non-Guarantor Subsidiaries | Eliminations | Consolidated |
|---|----------------|--------------------------------------|---|--------------|--------------|
| Cash flows (used in) provided by operating activities | \$ (245) | \$ — | \$ 41 | \$ (1) | \$ (205) |
| Cash flows provided by (used in) investing activities | | | | | |
| Capital expenditures | (33) | — | (53) | — | (86) |
| Capitalized interest | — | — | (1) | — | (1) |
| Proceeds from sale of assets, net | 5 | — | — | — | 5 |
| Change in restricted cash | — | — | 1 | — | 1 |
| Return of capital from subsidiary from sales of accounts receivable | 117 (a) | — | — | (117) | — |
| | 89 | — | (53) | (117) | (81) |
| Cash flows provided by (used in) financing activities | | | | | |
| Net short-term debt borrowings | 4 | — | 11 | — | 15 |
| Borrowings of long-term debt | 1,007 | — | 284 | — | 1,291 |
| Repayments of long-term debt | (850) | — | (229) | — | (1,079) |
| Net intercompany loan borrowings (repayments) | (7) | — | 7 | — | — |
| Long-term debt and credit facility financing fees paid | (20) | — | (5) | — | (25) |
| Common stock dividends paid | — | — | (1) | 1 | — |
| Return of capital to parent from sales of accounts receivable | — | — | (117) (a) | 117 | — |
| | 134 | — | (50) | 118 | 202 |
| Effect of exchange rates on cash and cash equivalents | — | — | 5 | — | 5 |
| Change in cash and cash equivalents | (22) | — | (57) | — | (79) |
| Cash and cash equivalents (unrestricted) at beginning of period | 28 | — | 151 | — | 179 |
| Cash and cash equivalents (unrestricted) at end of period | \$ 6 | \$ — | \$ 94 | \$ — | \$ 100 |

(a) During the nine months ended September 30, 2017, Hexion Inc. contributed receivables of \$117 to a non-guarantor subsidiary as capital contributions, resulting in a non-cash transaction. During the nine months ended September 30, 2017, the non-guarantor subsidiary sold the contributed receivables to certain banks under various supplier financing agreements. The cash proceeds were returned to Hexion Inc. by the non-guarantor subsidiary as a return of capital. The sale of receivables has been included within cash flows from operating activities on the Combined non-guarantor subsidiaries. The return of the cash proceeds from the sale of receivables has been included as a financing outflow and an investing inflow on the Combined Non-Guarantor Subsidiaries and Hexion Inc., respectively.

HEXION INC.
NINE MONTHS ENDED SEPTEMBER 30, 2016
CONDENSED CONSOLIDATING STATEMENT OF CASH FLOWS (Unaudited)

| | Hexion Inc. | Combined Subsidiary Guarantors | Combined Non-Guarantor Subsidiaries | Eliminations | Consolidated |
|---|----------------|--------------------------------------|---|--------------|--------------|
| Cash flows (used in) provided by operating activities | \$ (198) | \$ 4 | \$ 67 | \$ (4) | \$ (131) |
| Cash flows provided by (used in) investing activities | | | | | |
| Capital expenditures | (47) | — | (44) | — | (91) |
| Capitalized interest | (1) | — | — | — | (1) |
| Proceeds from dispositions, net | 146 | — | 135 | — | 281 |
| Cash received on buyer's note | 45 | — | — | — | 45 |
| Proceeds from sale of assets, net | — | — | 1 | — | 1 |
| Change in restricted cash | — | — | (11) | — | (11) |
| Capital contribution to subsidiary | (13) | (9) | — | 22 | — |
| Investment in unconsolidated affiliates, net | (1) | — | — | — | (1) |
| Return of capital from subsidiary from sales of accounts receivable | 70 (a) | — | — | (70) | — |
| | 199 | (9) | 81 | (48) | 223 |
| Cash flows (used in) provided by financing activities | | | | | |
| Net short-term debt borrowings (repayments) | 2 | — | (15) | — | (13) |
| Borrowings of long-term debt | 280 | — | 181 | — | 461 |
| Repayments of long-term debt | (467) | — | (176) | — | (643) |
| Net intercompany loan borrowings (repayments) | 171 | — | (171) | — | — |
| Capital contributions | — | 9 | 13 | (22) | — |
| Common stock dividends paid | — | (4) | — | 4 | — |
| Return of capital to parent from sales of accounts receivable | — | — | (70) (a) | 70 | — |
| | (14) | 5 | (238) | 52 | (195) |
| Effect of exchange rates on cash and cash equivalents | — | — | 1 | — | 1 |
| Decrease in cash and cash equivalents | (13) | — | (89) | — | (102) |
| Cash and cash equivalents (unrestricted) at beginning of period | 62 | — | 166 | — | 228 |
| Cash and cash equivalents (unrestricted) at end of period | \$ 49 | \$ — | \$ 77 | \$ — | \$ 126 |

(a) During the nine months ended September 30, 2016, Hexion Inc. contributed receivables of \$70 to a non-guarantor subsidiary as capital contributions, resulting in a non-cash transaction. During the nine months ended September 30, 2016, the non-guarantor subsidiary sold the contributed receivables to certain banks under various supplier financing agreements. The cash proceeds were returned to Hexion Inc. by the non-guarantor subsidiary as a return of capital. The sale of receivables has been included within cash flows from operating activities on the Combined non-guarantor subsidiaries. The return of the cash proceeds from the sale of receivables has been included as a financing outflow and an investing inflow on the Combined Non-Guarantor Subsidiaries and Hexion Inc., respectively.

Item 2. Management's Discussion and Analysis of Financial Condition and Results of Operations (dollar amounts in millions)

The following commentary should be read in conjunction with the audited Consolidated Financial Statements and the accompanying notes and Management's Discussion and Analysis of Financial Condition and Results of Operations included in the Company's most recent Annual Report on Form 10-K.

Within the following discussion, unless otherwise stated, "the third quarter of 2017" refers to the three months ended September 30, 2017, "the third quarter of 2016" refers to the three months ended September 30, 2016, "the first nine months of 2017" refers to the nine months ended September 30, 2017 and "the first nine months of 2016" refers to the nine months ended September 30, 2016.

Forward-Looking and Cautionary Statements

Certain statements in this report, including without limitation, certain statements made under the caption "Overview and Outlook," are forward-looking statements within the meaning of and made pursuant to the safe harbor provisions of Section 27A of the Securities Act of 1933, as amended, and Section 21E of the Securities Exchange Act of 1934, as amended. In addition, our management may from time to time make oral forward-looking statements. All statements, other than statements of historical facts, are forward-looking statements. Forward-looking statements may be identified by the words "believe," "expect," "anticipate," "project," "plan," "estimate," "may," "will," "could," "should," "seek" or "intend" and similar expressions. Forward-looking statements reflect our current expectations and assumptions regarding our business, the economy and other future events and conditions and are based on currently available financial, economic and competitive data and our current business plans. Actual results could vary materially depending on risks and uncertainties that may affect our operations, markets, services, prices and other factors as discussed in the Risk Factors section of this report and our other filings with the Securities and Exchange Commission (the "SEC"). While we believe our assumptions are reasonable, we caution you against relying on any forward-looking statements as it is very difficult to predict the impact of known factors, and it is impossible for us to anticipate all factors that could affect our actual results. Important factors that could cause actual results to differ materially from those in the forward-looking statements include, but are not limited to, a weakening of global economic and financial conditions, interruptions in the supply of or increased cost of raw materials, the loss of, or difficulties with the further realization of, cost savings in connection with our strategic initiatives, including transactions with our affiliate, Momentive Performance Materials Inc., the impact of our substantial indebtedness, our failure to comply with financial covenants under our credit facilities or other debt, pricing actions by our competitors that could affect our operating margins, changes in governmental regulations and related compliance and litigation costs and the other factors listed in the Risk Factors section of this report and in our other SEC filings. For a more detailed discussion of these and other risk factors, see the Risk Factors section of this report and our most recent filings made with the SEC. All forward-looking statements are expressly qualified in their entirety by this cautionary notice. The forward-looking statements made by us speak only as of the date on which they are made. Factors or events that could cause our actual results to differ may emerge from time to time. We undertake no obligation to publicly update or revise any forward-looking statement as a result of new information, future events or otherwise, except as otherwise required by law.

Overview and Outlook

Business Overview

We are a large participant in the specialty chemicals industry, and a leading producer of adhesive and structural resins and coatings. Thermosets are a critical ingredient for virtually all paints, coatings, glues and other adhesives produced for consumer or industrial uses. We provide a broad array of thermosets and associated technologies and have significant market positions in all of the key markets that we serve.

Our products are used in thousands of applications and are sold into diverse markets, such as forest products, architectural and industrial paints, packaging, consumer products and automotive coatings, as well as higher growth markets, such as wind energy and electrical composites. Major industry sectors that we serve include industrial/marine, construction, consumer/durable goods, automotive, wind energy, aviation, electronics, architectural, civil engineering, repair/remodeling and oil and gas drilling. Key drivers for our business include general economic and industrial conditions, including housing starts, auto build rates, wind energy turbine installations and active oil and gas drilling rigs. In addition, due to the nature of our products and the markets we serve, competitor capacity constraints and the availability of similar products in the market may impact our results. As is true for many industries, our financial results are impacted by the effect on our customers of economic upturns or downturns, as well as by the impact on our own costs to produce, sell and deliver our products. Our customers use most of our products in their production processes. As a result, factors that impact their industries can and have significantly affected our results.

Through our worldwide network of strategically located production facilities, we serve more than 4,200 customers in approximately 100 countries. Our global customers include large companies in their respective industries, such as 3M, Akzo Nobel, BASF, Bayer, Dow, Louisiana Pacific, Monsanto, Owens Corning, PPG Industries, Valspar and Weyerhaeuser.

Reportable Segments

Our business segments are based on the products that we offer and the markets that we serve. At September 30, 2017, we had two reportable segments: Epoxy, Phenolic and Coating Resins and Forest Products Resins. A summary of the major products of our reportable segments follows:

- **Epoxy, Phenolic and Coating Resins:** epoxy specialty resins, phenolic encapsulated substrates, versatic acids and derivatives, basic epoxy resins and intermediates, phenolic specialty resins and molding compounds, polyester resins, acrylic resins and vinylic resins
- **Forest Products Resins:** forest products resins and formaldehyde applications

2017 Overview

Following are highlights from our results of operations for the nine months ended September 30, 2017 and 2016:

| | 2017 | 2016 | \$ Change | % Change |
|------------------------------------|---------------|---------------|----------------|--------------|
| Statements of Operations: | | | | |
| Net sales | \$ 2,696 | \$ 2,680 | \$ 16 | 1 % |
| Gross profit | 384 | 323 | 61 | 19 % |
| Operating income | 113 | 280 | (167) | (60)% |
| (Loss) income before income tax | (133) | 91 | (224) | 246 % |
| Net (loss) income | (146) | 59 | (205) | 347 % |
| Segment EBITDA: | | | | |
| Epoxy, Phenolic and Coating Resins | \$ 143 | \$ 230 | \$ (87) | (38)% |
| Forest Products Resins | 195 | 184 | 11 | 6 % |
| Corporate and Other | (47) | (50) | 3 | 6 % |
| Total | \$ 291 | \$ 364 | \$ (73) | (20)% |

- Net Sales**—Net sales in the first nine months of 2017 were \$2.7 billion, an increase of 1% compared with the first nine months of 2016. Excluding \$185 of net sales in the first nine months of 2016 from our divested Performance Adhesives, Powder Coatings, Additives & Acrylic Coatings and Monomers businesses (“PAC Business”), net sales increased by 8%. These increases were driven by pricing, which positively impacted sales by \$127 due largely to raw material price increases passed through to customers across many of our businesses, partially offset by competitive pricing pressures in our epoxy specialty business. Overall, volumes positively impacted net sales by \$73 driven by strong market demand in our North American formaldehyde business, as well as the additional capacity from our new formaldehyde plants. Additionally, volumes increased in our North American forest products resins business due to modest growth in the U.S. housing market and in our base epoxy resins business as it continues to recover from cyclical trough conditions. These increases were partially offset by volume decreases in our epoxy specialty business driven by an ongoing destocking of wind blades in China. The impact of foreign exchange translation positively impacted net sales by \$1 as the strengthening of the Brazilian real against the U.S. dollar was largely offset by the strengthening of the U.S. dollar against the euro and Chinese yuan in the first nine months of 2017 compared to the first nine months of 2016.
- Net Loss**—Net loss in the first nine months of 2017 was \$146, a decrease of \$205 as compared with net income of \$59 in the first nine months of 2016. This decrease was primarily driven by the absence of gains on the disposition of our PAC Business and HA-International, LLC (“HAI”) joint venture interest of \$240 and gains on debt buybacks of \$47 that positively impacted the first nine months of 2016. These decreases to net loss were partially offset by increased gross margin and decreased business realignment costs. Higher gross margin is primarily driven by a reduction in accelerated depreciation of \$113 related to our Norco, LA facility closure that occurred in 2016, partially offset by the absence of gross margin from our divested PAC Business in 2017 results. Lower business realignment costs are largely attributable to approximately \$23 of costs in the first nine months of 2016 related to the Norco, LA facility closure that did not recur in 2017.
- Segment EBITDA**—For the first nine months of 2017, Segment EBITDA was \$291, a decrease of 20% compared with \$364 in the first nine months of 2016. Excluding Segment EBITDA of \$30 in the first nine months of 2016 from our divested PAC Business and HAI joint venture, Segment EBITDA decreased by 13%. This decrease was primarily driven by volume decreases and margin compression in our specialty epoxy business discussed above, \$13 of insurance recoveries received in the first nine months of 2016 in our versatic acids business that did not recur in 2017 and \$6 of negative impact related to the hurricanes that occurred in the U.S. during the third quarter of 2017. These decreases were partially offset by volume increases in our North American formaldehyde business discussed above, as well as continued cost efficiencies associated with our new North American formaldehyde plants. Additionally, year over year improvements in our oilfield and base epoxy resins businesses positively impacted Segment EBITDA, as both of these businesses continue to recover from cyclical trough conditions.
- Restructuring and Cost Reduction Programs**—In November 2017, we initiated new cost reduction programs that will be finalized in the first half of 2018. We expect these programs to generate approximately \$40 of annual savings once fully implemented. During the first nine months of 2017, we have achieved \$20 in cost savings related to our ongoing productivity and cost reduction programs. With the addition of the new programs discussed above, we have a total of approximately \$54 of in-process cost savings, which we expect to achieve in the next 12 to 18 months.
- Growth Initiatives**—Our new North American formaldehyde plants, the last of which was completed in the first quarter of 2016, have provided us with additional capacity to support expected long-term growth in this business and has helped drive improved results in 2017. In addition, we continue to focus on new product development and have taken steps to improve our analytical and product development services for our global grid, such as the recently completed expansion of our technology center in Edmonton. Further, we continue to invest in new coatings technologies and capacity in response to recent volatile organic compounds regulation in China.

- **2017 Refinancing Transactions**—In February 2017, we issued \$485 aggregate principal amount of New First Lien Notes and \$225 aggregate principal amount of New Senior Secured Notes. We used the net proceeds from these notes, together with cash on our balance sheet, to redeem all of our outstanding Old Senior Secured Notes. In May 2017, we issued an additional \$75 aggregate principal amount of New First Lien Notes. We also amended and restated our ABL Facility, which effectively extended the maturity date of the facility from March 2018 to December 2021 and reduced the existing commitments under the facility from \$400 to \$350.

Short-term Outlook

We expect strong market demand combined with the incremental capacity created by our new formaldehyde plants in North America to continue to drive volume increases in our North American formaldehyde business for the remainder of 2017 and into 2018. Additionally, we continue to expect improved demand in our North American forest products resins business due to ongoing modest growth in U.S. housing starts.

We expect demand in our epoxy specialty business to remain below historical levels during the remainder of 2017 due to softness in the China wind energy market, although demand is expected to improve in the first half of 2018. We also expect this business to benefit from significant improvements in market demand for waterborne coatings over the next few years, primarily in China. Additionally, we expect our phenolic resins business to benefit from cost reductions associated with our ongoing grid optimization efforts in Germany. Further, we anticipate volumes in our versatic acid and derivatives business to continue to improve due to ongoing volume recovery and favorable market conditions. We also expect modest year over year improvement in our oilfield business through 2017 and into 2018 due to increased drilling activity. Lastly, we expect our base epoxy business to continue to improve in the remainder of 2017 and into 2018 due to our restructuring initiatives and favorable market conditions.

We expect raw material prices to stabilize through the remainder of 2017 and into 2018, following large increases in the first nine months of 2017.

Matters Impacting Comparability of Results

Dispositions of PAC Business and HAI Joint Venture Interest

During the second quarter of 2016, we completed the sales of both our PAC Business and our 50% interest in the HAI joint venture. As a result, when comparing 2017 to 2016, our results in the first nine months of 2017 exclude these divested businesses, while our results in the first nine months of 2016 include net sales of \$185 and Segment EBITDA of \$30 related to these divested businesses. Additionally, in the first nine months of 2016 we recorded a gain of \$240 on the disposition of these businesses.

Raw Material Prices

Raw materials comprise approximately 70% of our cost of sales. The three largest raw materials used in our production processes are phenol, methanol and urea. These materials represent about half of our total raw material costs. Fluctuations in energy costs, such as volatility in the price of crude oil and related petrochemical products, as well as the cost of natural gas have historically caused volatility in our raw material and utility costs. The average price of phenol, methanol, and urea increased by approximately 16%, 56%, and 2% respectively, in the first nine months of 2017 compared to the first nine months of 2016. The impact of passing through raw material price changes to customers can result in significant variances in sales comparisons from year to year.

Other Comprehensive Income

Our other comprehensive income is significantly impacted by foreign currency translation and, to a lesser extent, impacted by defined benefit pension and postretirement benefit adjustments. The impact of foreign currency translation is driven by the translation of assets and liabilities of our foreign subsidiaries which are denominated in functional currencies other than the U.S. dollar. The primary assets and liabilities driving the adjustments are cash and cash equivalents; accounts receivable; inventory; property, plant and equipment; accounts payable; pension and other postretirement benefit obligations and certain intercompany loans payable and receivable. The primary currencies in which these assets and liabilities are denominated are the euro, Brazilian real, Canadian dollar, Chinese yuan and Australian dollar. The impact of defined benefit pension and postretirement benefit adjustments is primarily driven by unrecognized prior service cost related to our defined benefit and other postretirement benefit plans, as well as the subsequent amortization of these amounts from accumulated other comprehensive income in periods following the initial recording of such items.

Results of Operations

CONDENSED CONSOLIDATED STATEMENTS OF OPERATIONS

| | Three Months Ended September 30, | | | |
|--|---|-----------------------|-------------|-----------------------|
| | 2017 | | 2016 | |
| | \$ | % of Net Sales | \$ | % of Net Sales |
| Net sales | \$ 914 | 100 % | \$ 819 | 100 % |
| Cost of sales | 783 | 86 % | 680 | 83 % |
| Accelerated depreciation | 14 | 2 % | 21 | 3 % |
| Gross profit | 117 | 12 % | 118 | 14 % |
| Selling, general and administrative expense | 75 | 8 % | 69 | 8 % |
| Asset impairments | 13 | 1 % | — | — % |
| Business realignment costs (income) | 10 | 1 % | (3) | — % |
| Other operating expense, net | 1 | — % | 7 | 1 % |
| Operating income | 18 | 2 % | 45 | 5 % |
| Interest expense, net | 82 | 9 % | 76 | 9 % |
| Gain on extinguishment of debt | — | — % | (3) | — % |
| Other non-operating (income) expense, net | (3) | — % | 2 | — % |
| Total non-operating expense | 79 | 9 % | 75 | 9 % |
| Loss before income tax and earnings from unconsolidated entities | (61) | (7)% | (30) | (4)% |
| Income tax expense | 9 | 1 % | 16 | 2 % |
| Loss before earnings from unconsolidated entities | (70) | (8)% | (46) | (6)% |
| Losses from unconsolidated entities, net of taxes | — | — % | (1) | — % |
| Net loss | \$ (70) | (8)% | \$ (47) | (6)% |
| Other comprehensive income | \$ 10 | | \$ 7 | |

Three Months Ended September 30, 2017 vs. Three Months Ended September 30, 2016

Net Sales

In the third quarter of 2017, net sales increased by \$95, or 12%, compared to the third quarter of 2016. Volume increases had a positive impact on net sales of \$43, which was primarily due to year over year volume growth in our base epoxy resins, oilfield businesses, as well as continued strong market demand in our North American formaldehyde and forest products resins businesses. Pricing positively impacted sales by \$37 due largely to raw material price increases passed through to customers across many of our businesses, partially offset by competitive pressures in our epoxy specialty and oilfield businesses. Foreign currency translation positively impacted net sales by \$15 due to an overall strengthening of various foreign currencies against the U.S. dollar in the third quarter of 2017 compared to the third quarter of 2016.

Gross Profit

In the third quarter of 2017, gross profit decreased by \$1 compared to the third quarter of 2016. Gross profit as a percentage of net sales decreased by 2% primarily due to margin compression driven by the competitive pricing pressures discussed above, as well as unfavorable raw material price inflation during the third quarter of 2017. This impact was partially offset by a decrease in accelerated depreciation in the third quarter of 2017 as compared to the third quarter of 2016.

Operating Income

In the third quarter of 2017, operating income decreased by \$27 compared to the third quarter of 2016, driven primarily by an increase in business realignment costs of \$13, asset impairments of \$13, selling, general and administrative expense of \$6 and the decrease in gross profit of \$1 discussed above. The increase in business realignment costs is largely attributable to a one-time reduction in the asset retirement obligation ("ARO") liability of \$11 that occurred in the third quarter of 2016 related to the Norco plant closure. In the third quarter of 2017, a goodwill impairment of \$13 was recognized as a result of the estimated fair value of our oilfield reporting unit being less than the carrying value of its net assets. The increase in selling, general and administrative expense was due primarily to \$4 of insurance recoveries in the third quarter of 2016 related to the supplier disruption in our European versatic acids business. These overall decreases to operating income were partially offset by a decrease in other operating expense of \$6 driven by a decrease in realized and unrealized foreign currency transaction losses.

Non-Operating Expense

In the third quarter of 2017, total non-operating expense increased by \$4 compared to the third quarter of 2016. This was primarily due to an increase in interest expense of \$6 driven by higher average debt levels and lower gains on debt extinguishment of \$3 due to gains on debt buybacks in the third quarter of 2016 that did not recur in 2017, partially offset by an increase of \$5 in other non-operating income due to increased realized and unrealized foreign currency transaction gains.

Income Tax Expense

The effective tax rate was (15)% and (53)% for the third quarter of 2017 and 2016, respectively. The change in the effective tax rate was primarily attributable to the amount and distribution of income and losses among the various jurisdictions in which we operate. The effective tax rates were also impacted by operating gains and losses generated in jurisdictions where no tax expense or benefit was recognized due to the maintenance of a full valuation allowance.

For the third quarter of 2017 and 2016, income tax expense relates primarily to income from certain foreign operations. In 2017, losses in the United States and certain foreign jurisdictions had no impact on income tax expense as no tax benefit was recognized due to the maintenance of a full valuation allowance. In 2016, the income tax expense related to the gain on dispositions was substantially reduced by net operating loss utilization which was offset by a decrease to the respective valuation allowances.

Other Comprehensive Income

For the third quarter of 2017, foreign currency translation positively impacted other comprehensive income by \$10, primarily due to an overall strengthening of various foreign currencies against the U.S. dollar in the third quarter of 2017.

For the third quarter of 2016, other comprehensive income of \$7 relates to the positive impact of foreign currency, primarily due to the strengthening of the euro against the U.S. dollar.

| | Nine Months Ended September 30, | | | |
|---|--|-----------------------|-------------|-----------------------|
| | 2017 | | 2016 | |
| | \$ | % of Net Sales | \$ | % of Net Sales |
| Net sales | \$ 2,696 | 100 % | \$ 2,680 | 100 % |
| Cost of sales | 2,298 | 85 % | 2,230 | 83 % |
| Accelerated depreciation | 14 | 1 % | 127 | 5 % |
| Gross profit | 384 | 14 % | 323 | 12 % |
| Selling, general and administrative expense | 227 | 8 % | 235 | 9 % |
| Gain on dispositions | — | — % | (240) | (9)% |
| Asset impairments | 13 | — % | — | — % |
| Business realignment costs | 27 | 1 % | 42 | 2 % |
| Other operating expense, net | 4 | — % | 6 | — % |
| Operating income | 113 | 5 % | 280 | 10 % |
| Interest expense, net | 247 | 9 % | 235 | 9 % |
| Loss (gain) on extinguishment of debt | 3 | — % | (47) | (2)% |
| Other non-operating (income) expense, net | (4) | — % | 1 | — % |
| Total non-operating expense | 246 | 9 % | 189 | 7 % |
| (Loss) income before income tax and earnings from unconsolidated entities | (133) | (4)% | 91 | 3 % |
| Income tax expense | 16 | 1 % | 40 | 1 % |
| (Loss) income before earnings from unconsolidated entities | (149) | (5)% | 51 | 2 % |
| Earnings from unconsolidated entities, net of taxes | 3 | — % | 8 | — % |
| Net (loss) income | \$ (146) | (5)% | \$ 59 | 2 % |
| Other comprehensive income | \$ 25 | | \$ 7 | |

Nine Months Ended September 30, 2017 vs. Nine Months Ended September 30, 2016

Net Sales

In the first nine months of 2017, net sales increased by \$16, or 1%, compared to the first nine months of 2016. Excluding \$185 of net sales in the first nine months of 2016 from our PAC Business that did not recur in 2017, net sales increased by 8%. Pricing positively impacted sales by \$127 due largely to raw material price increases passed through to customers across many of our businesses, partially offset by competitive pressures in our epoxy specialty business. Volume increases positively impacted net sales by \$73 driven by strong market demand in our North American formaldehyde business combined with the additional capacity from our new formaldehyde plants. Additionally, volumes increased in our North American forest products resins business due to modest growth in the U.S. housing market. Volumes also increased in our base epoxy resins and oilfield businesses as these businesses continue to recover from cyclical trough conditions. These increases were partially offset by volume decreases in our epoxy specialty business driven by an ongoing destocking of wind blades in China. Lastly, the impact of foreign exchange translation positively impacted net sales by \$1 as the strengthening of the Brazilian real against the U.S. dollar was largely offset by the strengthening of the U.S. dollar against the euro and Chinese yuan in the first nine months of 2017 compared to the first nine months of 2016.

Gross Profit

In the first nine months of 2017, gross profit increased by \$61 compared to the first nine months of 2016, primarily due to the absence of \$127 of accelerated depreciation recorded in the first nine months of 2016 related to the closure of our Norco, LA facility. Gross profit as a percentage of net sales increased by 2%, primarily due to the impact of the accelerated depreciation discussed above, which had a negative impact of 5% on 2016 gross profit. This impact was partially offset by margin compression driven by the competitive pricing pressures discussed above, as well as unfavorable raw material price inflation during the first nine months of 2017.

Operating Income

In the first nine months of 2017, operating income decreased by \$167 compared to the first nine months of 2016, primarily due to the gain on dispositions of \$240 related to the sale of our PAC Business and HAI joint venture interest in 2016 that did not recur in 2017 and an increase in asset impairments of \$13. These decreases to operating income was partially offset by the increase in gross profit of \$61 discussed above, as well as decreases in business realignment costs of \$15 and in selling, general and administrative expense of \$8. The decrease in business realignment costs is largely attributable to costs in the first nine months of 2016 related to the Norco, LA facility closure that did not recur in 2017. In the first nine months of 2017, a goodwill impairment of \$13 was recognized as a result of the estimated fair value of our oilfield reporting unit being less than the carrying value of its net assets. The decrease in selling, general and administrative expense was due primarily to lower compensation and benefits expense driven by our recent cost savings and productivity actions, as well as the sale of our PAC Business in the second quarter of 2016, partially offset by \$14 of insurance recoveries in the first nine months of 2016 related to the supplier disruption in our European versatic acids business.

Non-Operating Expense

In the first nine months of 2017, total non-operating expense increased by \$57 compared to the first nine months of 2016. This was primarily due to lower gains on debt extinguishment of \$50 due to gains on debt buybacks in the first nine months of 2016 that did not recur in 2017 and an increase in interest expense of \$12 driven by higher average debt levels, partially offset by an increase of \$5 in other non-operating income due to increased realized and unrealized foreign currency transaction gains.

Income Tax Expense

The effective tax rate was (12)% and 44% for the first nine months of 2017 and 2016, respectively. The change in the effective tax rate was primarily attributable to the amount and distribution of income and losses among the various jurisdictions in which we operate. The effective tax rates were also impacted by operating gains and losses generated in jurisdictions where no tax expense or benefit was recognized due to the maintenance of a full valuation allowance.

For the first nine months of 2017 and 2016, income tax expense relates primarily to income from certain foreign operations. In 2017, losses in the United States and certain foreign jurisdictions had no impact on income tax expense as no tax benefit was recognized due to the maintenance of a full valuation allowance. In 2016, the income tax expense related to the gain on dispositions was substantially reduced by net operating loss utilization which was offset by a decrease to the respective valuation allowances.

Other Comprehensive Income

For the first nine months of 2017, foreign currency translation positively impacted other comprehensive income by \$25, primarily due to an overall strengthening of various foreign currencies against the U.S. dollar in the third quarter of 2017.

For the first nine months of 2016, other comprehensive income of \$7 relates to \$8 positive impact of foreign currency, primarily due to the strengthening of the euro, Brazilian real and Canadian dollar against the U.S. dollar, partially offset by \$1 of amortization of prior service costs related to defined benefit pension and postretirement benefits.

Results of Operations by Segment

Following are net sales and Segment EBITDA (earnings before interest, income taxes, depreciation and amortization) by reportable segment. Segment EBITDA is defined as EBITDA adjusted for certain non-cash items and other income and expenses. Segment EBITDA is the primary performance measure used by our senior management, the chief operating decision-maker and the board of directors to evaluate operating results and allocate capital resources among segments. Segment EBITDA is also the profitability measure used to set management and executive incentive compensation goals. Segment EBITDA should not be considered a substitute for net loss or other results reported in accordance with U.S. GAAP. Segment EBITDA may not be comparable to similarly titled measures reported by other companies.

| | Three Months Ended September 30, | | Nine Months Ended September 30, | |
|------------------------------------|----------------------------------|---------------|---------------------------------|-----------------|
| | 2017 | 2016 | 2017 | 2016 |
| Net Sales ⁽¹⁾: | | | | |
| Epoxy, Phenolic and Coating Resins | \$ 528 | \$ 476 | \$ 1,537 | \$ 1,664 |
| Forest Products Resins | 386 | 343 | 1,159 | 1,016 |
| Total | \$ 914 | \$ 819 | \$ 2,696 | \$ 2,680 |
| Segment EBITDA: | | | | |
| Epoxy, Phenolic and Coating Resins | \$ 45 | \$ 64 | \$ 143 | \$ 230 |
| Forest Products Resins | 66 | 65 | 195 | 184 |
| Corporate and Other | (15) | (17) | (47) | (50) |
| Total | \$ 96 | \$ 112 | \$ 291 | \$ 364 |

(1) Intersegment sales are not significant and, as such, are eliminated within the selling segment.

Three Months Ended September 30, 2017 vs. Three Months Ended September 30, 2016 Segment Results

Following is an analysis of the percentage change in net sales by segment from the three months ended September 30, 2016 to the three months ended September 30, 2017:

| | Volume | Price/Mix | Currency Translation | Total |
|------------------------------------|--------|-----------|----------------------|-------|
| Epoxy, Phenolic and Coating Resins | 7% | 2% | 2% | 11% |
| Forest Products Resins | 3% | 9% | 1% | 13% |

Epoxy, Phenolic and Coating Resins

Net sales in the third quarter of 2017 increased by \$52, or 11%, when compared to the third quarter of 2016. Volume positively impacted net sales by \$32, primarily due to volume growth in our base epoxy resins and oilfield businesses. The impact of foreign exchange translation positively impacted net sales by \$11, due primarily to the strengthening of the euro against the U.S. dollar, partially offset by the strengthening of the U.S. dollar against the Chinese yuan in the third quarter of 2017 compared to the third quarter of 2016. Lastly, pricing positively impacted net sales by \$9 due primarily to raw material price increases passed through to customers across many of our businesses, partially offset by competitive pressures in our epoxy specialty and oilfield businesses.

Segment EBITDA in the third quarter of 2017 decreased by \$19 to \$45 compared to the third quarter of 2016. The decrease was primarily due to margin compression and volume decreases in our epoxy specialty business, \$6 of negative impact related to the hurricanes that occurred in the U.S. during the third quarter of 2017 and \$4 of insurance recoveries received in the third quarter of 2016 in our versatic acids business that did not recur in 2017. These decreases were partially offset by year over year improvements in our oilfield and base epoxy resins businesses, as both continue to recover from cyclical trough conditions.

Forest Products Resins

Net sales in the third quarter of 2017 increased by \$43, or 13%, when compared to the third quarter of 2016. Pricing positively impacted net sales by \$28, which was primarily due to raw material price increases passed through to customers across many of our businesses. Volumes positively impacted net sales by \$11, and were primarily driven by strong market demand in our North American formaldehyde business combined with the additional capacity from our new formaldehyde plants. Additionally, volumes increased in our North American forest products resins business due to modest growth in the U.S. housing market. Foreign exchange translation positively impacted net sales by \$4 due to an overall strengthening of various foreign currencies against the U.S. dollar in the third quarter of 2017 compared to the third quarter of 2016.

Segment EBITDA in the third quarter of 2017 increased by \$1, to \$66, compared to the third quarter of 2016. This increase was primarily due to the volume increases in our North American formaldehyde discussed above, as well as continued cost efficiencies associated with our new North American formaldehyde plants.

Corporate and Other

Corporate and Other is primarily corporate, general and administrative expenses that are not allocated to the segments, such as shared service and administrative functions, unallocated foreign exchange gains and losses and legacy company costs not allocated to continuing segments. Corporate and Other charges in the third quarter of 2017 decreased by \$2 compared to the third quarter of 2016 due primarily to cost savings actions and lower incentive compensation accruals.

Nine Months Ended September 30, 2017 vs. Nine Months Ended September 30, 2016 Segment Results

Following is an analysis of the percentage change in net sales by segment from the nine months ended September 30, 2016 to the nine months ended September 30, 2017:

| | Volume | Price/Mix | Currency Translation | Impact of Dispositions | Total |
|------------------------------------|--------|-----------|----------------------|------------------------|-------|
| Epoxy, Phenolic and Coating Resins | 2% | 2% | (1)% | (11)% | (8)% |
| Forest Products Resins | 4% | 9% | 1 % | — % | 14 % |

Epoxy, Phenolic and Coating Resins

Net sales in the first nine months of 2017 decreased by \$127, or 8%, when compared to the first nine months of 2016. The majority of the decrease is due to the disposition of our PAC Business in the second quarter of 2016, which negatively impacted net sales by \$185. Pricing positively impacted net sales by \$39 due primarily to raw material price increases passed through to customers across many of our businesses, partially offset by competitive pressures in our epoxy specialty business. Volumes positively impacted net sales by \$28, primarily due to volume growth in our base epoxy resins and oilfield businesses, market driven volume increases in our phenolic resins business in North America and China and continued volume recovery in our European versatic acids business, partially offset by volume decreases in our epoxy specialty business largely driven by an ongoing destocking of wind blades in China. Lastly, these increases were partially offset by foreign exchange translation, which negatively impacted net sales by \$9, due primarily to the strengthening of the U.S. dollar against the euro and Chinese yuan in the first nine months of 2017 compared to the first nine months of 2016.

Segment EBITDA in the first nine months of 2017 decreased by \$87 to \$143 compared to the first nine months of 2016. The impact of the disposition of our PAC Business and HAI joint venture interest in the second quarter of 2016 contributed \$30 to this decrease. The remaining decrease was primarily due to margin compression and volume decreases in our epoxy specialty business, as well as a Segment EBITDA impact of \$13 related to insurance recoveries received in the first nine months of 2016 in our versatic acids business that did not recur in 2017 and \$6 of negative impact related to the hurricanes that occurred in the U.S. during the third quarter of 2017. These decreases were partially offset by improvements in our oilfield and base epoxy resins businesses, as both continue to recover from cyclical trough conditions.

Forest Products Resins

Net sales in the first nine months of 2017 increased by \$143, or 14%, when compared to the first nine months of 2016. Pricing positively impacted net sales by \$88, which was primarily due to raw material price increases passed through to customers across many of our businesses. Volumes positively impacted net sales by \$45, and were primarily driven by strong market demand in our North American formaldehyde business combined with the additional capacity from our new formaldehyde plants. Additionally, volumes increased in our North American forest products resins business due to modest growth in the U.S. housing market. The impact of foreign exchange translation positively impacted net sales by \$10, due largely to the strengthening of the Brazilian real against the U.S. dollar, partially offset by strengthening of the U.S. dollar against the euro in the first nine months of 2017 compared to the first nine months of 2016.

Segment EBITDA in the first nine months of 2017 increased by \$11, to \$195, compared to the first nine months of 2016. This increase was primarily due to the volume increases in our North American formaldehyde business discussed above, as well as continued cost efficiencies associated with our new North American formaldehyde plants.

Corporate and Other

Corporate and Other is primarily corporate, general and administrative expenses that are not allocated to the segments, such as shared service and administrative functions, unallocated foreign exchange gains and losses and legacy company costs not allocated to continuing segments. Corporate and Other charges in the first nine months of 2017 decreased by \$3 compared to the first nine months of 2016 due primarily to cost savings actions and lower incentive compensation accruals.

Reconciliation of Net (Loss) Income to Segment EBITDA:

| | Three Months Ended September 30, | | Nine Months Ended September 30, | |
|---|----------------------------------|---------|---------------------------------|--------|
| | 2017 | 2016 | 2017 | 2016 |
| Reconciliation: | | | | |
| Net (loss) income | \$ (70) | \$ (47) | \$ (146) | \$ 59 |
| Income tax expense | 9 | 16 | 16 | 40 |
| Interest expense, net | 82 | 76 | 247 | 235 |
| Depreciation and amortization | 29 | 30 | 85 | 101 |
| Accelerated depreciation | 14 | 21 | 14 | 127 |
| EBITDA | \$ 64 | \$ 96 | \$ 216 | \$ 562 |
| Items not included in Segment EBITDA: | | | | |
| Business realignment costs (income) | \$ 10 | \$ (3) | \$ 27 | \$ 42 |
| Gain on dispositions | — | — | — | (240) |
| Asset impairments | 13 | — | 13 | — |
| Realized and unrealized foreign currency (gains) losses | (5) | 6 | (7) | (3) |
| (Gain) loss on extinguishment of debt | — | (3) | 3 | (47) |
| Other | 14 | 16 | 39 | 50 |
| Total adjustments | 32 | 16 | 75 | (198) |
| Segment EBITDA | \$ 96 | \$ 112 | \$ 291 | \$ 364 |
| Segment EBITDA: | | | | |
| Epoxy, Phenolic and Coating Resins | \$ 45 | \$ 64 | \$ 143 | \$ 230 |
| Forest Products Resins | 66 | 65 | 195 | 184 |
| Corporate and Other | (15) | (17) | (47) | (50) |
| Total | \$ 96 | \$ 112 | \$ 291 | \$ 364 |

Items Not Included in Segment EBITDA

Not included in Segment EBITDA are certain non-cash items and other income and expenses. For the three and nine months ended September 30, 2017 and 2016, these items primarily include expenses from retention programs and certain professional fees related to strategic projects. Business realignment costs for the three and nine months ended September 30, 2017 primarily include costs related to certain in-process facility rationalizations and cost reduction programs. Business realignment costs for the three and nine months ended September 30, 2016 primarily include costs related to the planned facility rationalizations within the Epoxy, Phenolic and Coating Resins segment and costs related to certain in-process cost reduction programs.

Liquidity and Capital Resources

We are a highly leveraged company. Our primary sources of liquidity are cash flows generated from operations and availability under the ABL Facility. Our primary liquidity requirements are interest, working capital and capital expenditures.

At September 30, 2017, we had \$3,733 of outstanding debt and \$310 in liquidity consisting of the following:

- \$100 of unrestricted cash and cash equivalents (of which \$94 is maintained in foreign jurisdictions);
- \$188 of borrowings available under our ABL Facility (\$350 borrowing base less \$124 of outstanding borrowings and \$38 of outstanding letters of credit); and
- \$22 of time drafts and borrowings available under credit facilities at certain international subsidiaries

Our net working capital (defined as accounts receivable and inventories less accounts payable) at September 30, 2017 and December 31, 2016 was \$485 and \$309, respectively. A summary of the components of our net working capital as of September 30, 2017 and December 31, 2016 is as follows:

| | September 30, 2017 | % of LTM Net Sales | December 31, 2016 | % of LTM Net Sales ⁽¹⁾ |
|---------------------|--------------------|--------------------|-------------------|-----------------------------------|
| Accounts receivable | \$ 500 | 14 % | \$ 390 | 12 % |
| Inventories | 332 | 10 % | 287 | 9 % |
| Accounts payable | (347) | (10)% | (368) | (11)% |
| Net working capital | \$ 485 | 14 % | \$ 309 | 10 % |

(1) The percentage of LTM Net Sales at December 31, 2016 exclude net sales related to our PAC Business, which was sold on June 30, 2016.

The increase in net working capital of \$176 from December 31, 2016 was primarily due to increases in accounts receivable of \$110 and inventory of \$45. Both of these increases were primarily the result of increased volumes in the third quarter of 2017 compared to the fourth quarter of 2016 due to market conditions and seasonality, as well as raw material price inflation. These increases to net working capital were partially offset by a decrease in accounts payable of \$21, largely related to raw material price inflation and the timing of vendor payments. To minimize the impact of seasonal changes in net working capital on cash flows, we continue to review inventory safety stock levels, focus on accelerating receivable collections by offering incentives to customers to encourage early payment or through the sale of receivables at a discount and negotiate with vendors or enter into inventory financing arrangements to extend payment terms.

We periodically borrow from the ABL Facility to support our short-term liquidity requirements, particularly when net working capital requirements increase in response to the seasonality of our volumes. As of September 30, 2017, there were \$124 of outstanding borrowings under the ABL Facility.

2017 Refinancing Transactions

In February 2017, we issued \$485 aggregate principal amount of New First Lien Notes and \$225 aggregate principal amount of New Senior Secured Notes. Upon the closing of these offerings, we used the net proceeds from these offerings, together with cash on our balance sheet, to redeem all of our outstanding 8.875% Senior Secured Notes due 2018 (the "Old Senior Secured Notes"), which occurred in March 2017.

In May 2017, we issued an additional \$75 aggregate principal amount of New First Lien Notes at an issue price of 100.5%. These notes mature on February 1, 2022 and have substantially the same terms as the New First Lien Notes issued in February 2017. We used the net proceeds from these notes for general corporate purposes.

In December 2016, we amended and restated the ABL Facility, with modifications to, among other things, permit the refinancing of the Old Senior Secured Notes. In connection with the issuance of the new notes in February 2017, certain lenders under the ABL Facility provided extended revolving facility commitments in an aggregate principal amount of \$350 with a maturity date of December 5, 2021 (subject to early maturity triggers), the existing commitments were terminated and the size of the ABL Facility was reduced from \$400 to \$350.

Short-Term Outlook

The following factors will impact cash flows for the remainder of 2017:

- **Interest and Income Taxes:** We expect cash outflows in 2017 related to interest payments on our debt of approximately \$300, with the largest components being paid in the second and fourth quarters, and income tax payments between \$15 and \$25.
- **Capital Spending:** Capital spending in 2017 is expected to be between \$100 and \$110, a significant decrease from 2016 due to the completion of large strategic growth projects in 2016, as well as our recent divestitures and restructuring activities at certain facilities.
- **Working Capital:** In the first nine months of 2017, our net working capital increased by \$176 due primarily to sequential volume increases, seasonality, inventory build for turnarounds and a weaker U.S. dollar. During the fourth quarter, we expect a decrease in net working capital, consistent with historical trends. We anticipate an overall increase in working capital in 2017, as compared to 2016.

We plan to fund these outflows with available cash and cash equivalents, cash from operations, available borrowings under our ABL Facility, as well as other liquidity actions. Based on our liquidity position as of September 30, 2017 and projections of operating cash flows, we expect to have sufficient liquidity to fund our operations for the next twelve months.

Historically, our liquidity position has been cyclical due to the timing of our interest payment obligations and seasonality of our volumes. We maintain normal commercial terms with our major vendors and customers. If certain of our commercial counterparties request changes to our terms it could put additional pressure on our liquidity position in certain times of the year.

We have \$1.9 billion of First Priority Senior Secured Notes and \$0.6 billion of Second Priority Notes maturing in 2020. Depending upon market, pricing and other conditions, including the current state of the high yield bond market, as well as our cash balances and available liquidity, we or our affiliates, may seek to acquire notes or other indebtedness of the Company through open market purchases, privately negotiated transactions, tender offers, redemption or otherwise, upon such terms and at such prices as we or our affiliates may determine (or as may be provided for in the indentures governing the notes), for cash or other consideration. In addition, the Company may sell certain assets to raise additional funds for reducing debt.

Sources and Uses of Cash

Following are highlights from our unaudited Condensed Consolidated Statements of Cash Flows:

| | Nine Months Ended September 30, | |
|---|---------------------------------|----------|
| | 2017 | 2016 |
| (Uses) sources of cash: | | |
| Operating activities | \$ (205) | \$ (131) |
| Investing activities | (81) | 223 |
| Financing activities | 202 | (195) |
| Effect of exchange rates on cash flow | 5 | 1 |
| Net change in cash and cash equivalents | \$ (79) | \$ (102) |

Operating Activities

In the first nine months of 2017, operations used \$205 of cash. Net loss of \$146 included \$116 of net non-cash expense items, consisting of depreciation and amortization of \$85, non-cash asset impairments and accelerated depreciation of \$27, amortization of deferred financing fees of \$12 and loss on debt extinguishment of \$3, partially offset by unrealized foreign currency gains of \$5, gains on sale of assets of \$1 and a deferred tax benefit of \$1. Net working capital used \$150, which was largely driven by increases in accounts receivable and inventories due primarily to volume increases related to market conditions and the seasonality of our businesses, as well as raw material price inflation. Changes in other assets and liabilities and income taxes payable used \$25 due to the timing of when items were expensed versus paid, which primarily included interest expense, employee retention programs, restructuring reserves, incentive compensation, pension plan contributions and taxes.

In the first nine months of 2016, operations used \$131 of cash. Net income of \$59 included \$93 of net non-cash income items, primarily consisting of gains on dispositions of \$240 related to the HAI and PAC dispositions, a gain on debt extinguishment of \$47 and unrealized foreign currency gains of \$40. These items were partially offset by depreciation and amortization of \$101, accelerated depreciation of \$127 and \$3 of deferred tax expense. Net working capital used \$155, which was driven by increases in accounts receivable and inventories and decreases in accounts payable in the first nine months of 2016, due primarily to the seasonality of our businesses and the timing of vendor payments. Changes in other assets and liabilities and income taxes payable provided \$58 due to the timing of when items were expensed versus paid, which primarily included interest expense, employee retention programs, restructuring reserves, incentive compensation, pension plan contributions and taxes.

Investing Activities

In the first nine months of 2017, investing activities used \$81 of cash, primarily driven by capital expenditures of \$87 (including capitalized interest), partially offset by net proceeds from the sale of assets of \$5 and an increase in restricted cash of \$1.

In the first nine months of 2016, investing activities provided \$223 of cash, primarily driven by net cash proceeds of \$326 related to the HAI and PAC dispositions and cash received on the HAI buyer's note. These items were partially offset by capital expenditures (including capitalized interest) of \$92 and an increase in restricted cash of \$11.

Financing Activities

In the first nine months of 2017, financing activities provided \$202 of cash. Net short-term debt borrowings were \$15 and net long-term debt borrowings were \$212. Our long-term debt borrowings primarily consisted of \$124 in borrowings under our ABL Facility, the refinancing of our Old Senior Secured Notes in February 2017, an additional \$75 aggregate principal amount of New First Lien Notes issued in May 2017 and \$23 related to the sale-leaseback financing of certain equipment at a plant within our Forest Products Resins segment that occurred in the third quarter of 2017.

In the first nine months of 2016, financing activities used \$195 of cash. Net short-term debt repayments were \$13 and net long-term debt repayments were \$182. Our long-term debt repayments primarily consisted of \$187 used to repurchase a portion of our 8.875% Senior Secured Notes due 2018 on the open market.

There are certain restrictions on the ability of certain of our subsidiaries to transfer funds to Hexion Inc. in the form of cash dividends, loans or otherwise, which primarily arise as a result of certain foreign government regulations or as a result of restrictions within certain subsidiaries' financing agreements limiting such transfers to the amounts of available earnings and profits or otherwise limit the amount of dividends that can be distributed. In either case, we have alternative methods to obtain cash from these subsidiaries in the form of intercompany loans and/or returns of capital in such instances where payment of dividends is limited to the extent of earnings and profits.

Covenant Compliance

The instruments that govern our indebtedness contain, among other provisions, restrictive covenants (and incurrence tests in certain cases) regarding indebtedness, dividends and distributions, mergers and acquisitions, asset sales, affiliate transactions, capital expenditures and, in the case of our ABL Facility, the maintenance of a financial ratio (depending on certain conditions). Payment of borrowings under the ABL Facility and our notes may be accelerated if there is an event of default as determined under the governing debt instrument. Events of default under the credit agreement governing our ABL Facility includes the failure to pay principal and interest when due, a material breach of representations or warranties, most covenant defaults, events of bankruptcy and a change of control. Events of default under the indentures governing our notes include the failure to pay principal and interest, a failure to comply with covenants, subject to a 30-day grace period in certain instances, and certain events of bankruptcy.

The indentures that govern our 6.625% First-Priority Senior Secured Notes, 10.00% First Lien Notes, New First Lien Notes, New Senior Secured Notes and 9.00% Second-Priority Senior Secured Notes (the "Secured Indentures") contain an Adjusted EBITDA to Fixed Charges ratio incurrence test which may restrict our ability to take certain actions such as incurring additional debt or making acquisitions if we are unable to meet this ratio (measured on a last twelve months, or LTM, basis) of at least 2.0:1. The Adjusted EBITDA to Fixed Charges Ratio under the Secured Indentures is generally defined as the ratio of (a) Adjusted EBITDA to (b) net interest expense excluding the amortization or write-off of deferred financing costs, each measured on an LTM basis.

The ABL Facility, which is subject to a borrowing base, does not have any financial maintenance covenant other than a minimum fixed charge coverage ratio of 1.0 to 1.0 that would only apply if our availability under the ABL Facility at any time is less than the greater of (a) \$35 and (b) 12.5% of the lesser of the borrowing base and the total ABL Facility commitments at such time. The fixed charge coverage ratio under the credit agreement governing the ABL Facility is generally defined as the ratio of (a) Adjusted EBITDA minus non-financed capital expenditures and cash taxes to (b) debt service plus cash interest expense plus certain restricted payments, each measured on an LTM basis. At September 30, 2017, our availability under the ABL Facility exceeded such levels; therefore, the minimum fixed charge covenant ratio did not apply. As of September 30, 2017, we were in compliance with all covenants that govern the ABL Facility. We do not believe that a covenant default under the ABL Facility is reasonably likely to occur in the foreseeable future.

Adjusted EBITDA is defined as EBITDA adjusted for certain non-cash and certain non-recurring items and other adjustments calculated on a pro-forma basis, including the expected future cost savings from business optimization programs or other programs and the expected future impact of acquisitions, in each case as determined under the governing debt instrument. As we are highly leveraged, we believe that including the supplemental adjustments that are made to calculate Adjusted EBITDA provides additional information to investors about our ability to comply with our financial covenants and to obtain additional debt in the future. Adjusted EBITDA and Fixed Charges are not defined terms under U.S. GAAP. Adjusted EBITDA is not a measure of financial condition, liquidity or profitability, and should not be considered as an alternative to net income (loss) determined in accordance with U.S. GAAP or operating cash flows determined in accordance with U.S. GAAP. Additionally, EBITDA is not intended to be a measure of free cash flow for management's discretionary use, as it does not take into account certain items such as interest and principal payments on our indebtedness, depreciation and amortization expense (because we use capital assets, depreciation and amortization expense is a necessary element of our costs and ability to generate revenue), working capital needs, tax payments (because the payment of taxes is part of our operations, it is a necessary element of our costs and ability to operate), non-recurring expenses and capital expenditures. Fixed Charges under the Secured Indentures should not be considered an alternative to interest expense.

Reconciliation of Net Loss to Adjusted EBITDA

The following table reconciles net loss to EBITDA and Adjusted EBITDA, and calculates the ratio of Adjusted EBITDA to Fixed Charges as calculated under our Secured Indentures for the period presented:

| | September 30, 2017 |
|---|--------------------|
| | LTM Period |
| Net loss | \$ (244) |
| Income tax expense | 13 |
| Interest expense, net | 323 |
| Depreciation and amortization | 115 |
| Accelerated depreciation | 16 |
| EBITDA | 223 |
| Adjustments to EBITDA: | |
| Asset impairments | 13 |
| Business realignment costs ⁽¹⁾ | 41 |
| Realized and unrealized foreign currency gains | (15) |
| Loss on extinguishment of debt | 1 |
| Unrealized loss on pension and postretirement benefits ⁽²⁾ | 34 |
| Other ⁽³⁾ | 73 |
| Cost reduction programs savings ⁽⁴⁾ | 54 |
| Adjusted EBITDA | \$ 424 |
| Pro forma fixed charges ⁽⁵⁾ | \$ 313 |
| Ratio of Adjusted EBITDA to Fixed Charges ⁽⁶⁾ | 1.35 |

- (1) Primarily represents headcount reduction expenses and plant rationalization costs related to cost reduction programs, termination costs and other costs associated with business realignments, as well as environmental liabilities related to closed sites.
- (2) Represents non-cash losses resulting from pension and postretirement benefit plan liability remeasurements.
- (3) Primarily includes employee retention program costs, certain professional fees related to strategic projects and legacy sites, business optimization expenses and management fees.
- (4) Represents pro forma impact of in-process cost reduction programs savings. Cost reduction program savings represent the unrealized headcount reduction savings and plant rationalization savings related to cost reduction programs and other unrealized savings associated with the Company's business realignments activities, and represent our estimate of the unrealized savings from such initiatives that would have been realized had the related actions been completed at the beginning of the LTM period. The savings are calculated based on actual costs of exiting headcount and elimination or reduction of site costs.
- (5) Reflects pro forma interest expense based on interest rates at September 30, 2017, as if the 2017 Refinancing Transactions had taken place at the beginning of the period.
- (6) The Company's ability to incur additional indebtedness, among other actions, is restricted under the Secured Indentures, unless the Company has an Adjusted EBITDA to Fixed Charges ratio of at least 2.0 to 1.0. As of September 30, 2017, we did not satisfy this test. As a result, we are subject to restrictions on our ability to incur additional indebtedness and to make investments; however, there are exceptions to these restrictions, including exceptions that permit indebtedness under our ABL Facility (available borrowings of which were \$188 at September 30, 2017).

Recently Issued Accounting Standards

See Note 2 in Item 1 of Part I of this Quarterly Report on Form 10-Q for a detailed description of recently issued accounting pronouncements.

Item 3. Quantitative and Qualitative Disclosures about Market Risk

There have been no material developments during the first nine months of 2017 on the matters we have previously disclosed about quantitative and qualitative market risk in our Annual Report on Form 10-K for the year ended December 31, 2016.

Item 4. Controls and Procedures

Evaluation of Disclosure Controls and Procedures

Our management, including the President and Chief Executive Officer and the Executive Vice President and Chief Financial Officer, performed an evaluation of the effectiveness of the Company's disclosure controls and procedures (as defined in Rules 13a-15(e) and 15d-15(e) under the Securities Exchange Act of 1934, as amended) as of September 30, 2017. Based upon that evaluation, the President and Chief Executive Officer and the Executive Vice President and Chief Financial Officer concluded that our disclosure controls and procedures were effective at September 30, 2017.

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Changes in Internal Control Over Financial Reporting

There have been no changes in the Company's internal control over financial reporting during our most recent fiscal quarter that have materially affected, or are reasonably likely to materially affect, the Company's internal control over financial reporting.

Part II

Item 1. Legal Proceedings

The Louisville Air Pollution Control District (the "District") has assessed the Company penalties totaling \$296,000 associated with alleged violations of the District's air pollution laws and the Company's air permit in 2016 and 2017. The Company is actively cooperating with the District to resolve this matter.

Item 1A. Risk Factors

There have been no material changes during the first nine months of 2017 in the risk factors that were included in our Annual Report on Form 10-K for the year ended December 31, 2016.

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

None.

Item 3. Defaults upon Senior Securities

None.

Item 4. Mine Safety Disclosures

This item is not applicable to the registrant.

Item 5. Other Information

In November 2017, the Company initiated new restructuring actions with the intent to optimize its cost structure. The Company expects these restructuring actions to generate approximately \$40 of incremental cost savings over the next 12 to 18 months. As of the filing date of this Quarterly Report on Form 10-Q, the total one-time cash costs expected to be incurred for these restructuring activities are estimated between \$30 and \$40, consisting primarily of workforce reduction costs.

Item 6. Exhibits

31.1 Rule 13a-14 Certifications:

[\(a\) Certificate of the Chief Executive Officer](#)

[\(b\) Certificate of the Chief Financial Officer](#)

32.1 [Section 1350 Certifications](#)

101.INS* XBRL Instance Document

101.SCH* XBRL Schema Document

101.CAL* XBRL Calculation Linkbase Document

101.DEF* XBRL Definition Linkbase Document

101.LAB* XBRL Label Linkbase Document

101.PRE* XBRL Presentation Linkbase Document

* Attached as Exhibit 101 to this report are documents formatted in XBRL (Extensible Business Reporting Language). The financial information in the XBRL-related documents is "unaudited" or "unreviewed."

SIGNATURE

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.

HEXION INC.

Date: November 14, 2017

/s/ George F. Knight

George F. Knight

Executive Vice President and Chief Financial Officer

(Principal Financial Officer)

Certification of Financial Statements and Internal Controls

I, Craig A. Rogerson, certify that:

1. I have reviewed this Quarterly Report on Form 10-Q of Hexion Inc.;
2. Based on my knowledge, this report does not contain any untrue statement of a material fact or omit to state a material fact necessary to make the statements made, in light of the circumstances under which such statements were made, not misleading with respect to the period covered by this report;
3. Based on my knowledge, the financial statements, and other financial information included in this report, fairly present in all material respects the financial condition, results of operations and cash flows of the registrant as of, and for, the periods presented in this report;
4. The registrant's other certifying officer and I are responsible for establishing and maintaining disclosure controls and procedures (as defined in Exchange Act Rules 13a-15(e) and 15d-15(e)) and internal control over financial reporting (as defined in Exchange Act Rules 13a-15(f) and 15d-15(f)) for the registrant and have:
 - a. Designed such disclosure controls and procedures, or caused such disclosure controls and procedures to be designed under our supervision, to ensure that material information relating to the registrant, including its consolidated subsidiaries, is made known to us by others within those entities, particularly during the period in which this report is being prepared;
 - b. Designed such internal control over financial reporting, or caused such internal control over financial reporting to be designed under our supervision, to provide reasonable assurance regarding the reliability of financial reporting and the preparation of financial statements for external purposes in accordance with generally accepted accounting principles;
 - c. Evaluated the effectiveness of the registrant's disclosure controls and procedures and presented in this report our conclusions about the effectiveness of the disclosure controls and procedures, as of the end of the period covered by this report based on such evaluation; and
 - d. Disclosed in this report any change in the registrant's internal control over financial reporting that occurred during the registrant's most recent fiscal quarter (the registrant's fourth fiscal quarter in the case of an annual report) that has materially affected, or is reasonably likely to materially affect, the registrant's internal control over financial reporting; and
5. The registrant's other certifying officer and I have disclosed, based on our most recent evaluation of internal control over financial reporting, to the registrant's auditors and the audit committee of the registrant's board of directors (or persons performing the equivalent functions):
 - a. All significant deficiencies and material weaknesses in the design or operation of internal control over financial reporting which are reasonably likely to adversely affect the registrant's ability to record, process, summarize and report financial information; and
 - b. Any fraud, whether or not material, that involves management or other employees who have a significant role in the registrant's internal control over financial reporting.

Date: November 14, 2017

/s/ Craig A. Rogerson

Craig A. Rogerson

Chief Executive Officer

Certification of Financial Statements and Internal Controls

I, George F. Knight, certify that:

1. I have reviewed this Quarterly Report on Form 10-Q of Hexion Inc.;
2. Based on my knowledge, this report does not contain any untrue statement of a material fact or omit to state a material fact necessary to make the statements made, in light of the circumstances under which such statements were made, not misleading with respect to the period covered by this report;
3. Based on my knowledge, the financial statements, and other financial information included in this report, fairly present in all material respects the financial condition, results of operations and cash flows of the registrant as of, and for, the periods presented in this report;
4. The registrant's other certifying officer and I are responsible for establishing and maintaining disclosure controls and procedures (as defined in Exchange Act Rules 13a-15(e) and 15d-15(e)) and internal control over financial reporting (as defined in Exchange Act Rules 13a-15(f) and 15d-15(f)) for the registrant and have:
 - a. Designed such disclosure controls and procedures, or caused such disclosure controls and procedures to be designed under our supervision, to ensure that material information relating to the registrant, including its consolidated subsidiaries, is made known to us by others within those entities, particularly during the period in which this report is being prepared;
 - b. Designed such internal control over financial reporting, or caused such internal control over financial reporting to be designed under our supervision, to provide reasonable assurance regarding the reliability of financial reporting and the preparation of financial statements for external purposes in accordance with generally accepted accounting principles;
 - c. Evaluated the effectiveness of the registrant's disclosure controls and procedures and presented in this report our conclusions about the effectiveness of the disclosure controls and procedures, as of the end of the period covered by this report based on such evaluation; and
 - d. Disclosed in this report any change in the registrant's internal control over financial reporting that occurred during the registrant's most recent fiscal quarter (the registrant's fourth fiscal quarter in the case of an annual report) that has materially affected, or is reasonably likely to materially affect, the registrant's internal control over financial reporting; and
5. The registrant's other certifying officer and I have disclosed, based on our most recent evaluation of internal control over financial reporting, to the registrant's auditors and the audit committee of the registrant's board of directors (or persons performing the equivalent functions):
 - a. All significant deficiencies and material weaknesses in the design or operation of internal control over financial reporting which are reasonably likely to adversely affect the registrant's ability to record, process, summarize and report financial information; and
 - b. Any fraud, whether or not material, that involves management or other employees who have a significant role in the registrant's internal control over financial reporting.

Date: November 14, 2017

/s/ George F. Knight

George F. Knight

Chief Financial Officer

**Certification Pursuant To
18 U.S.C. Section 1350,
As Adopted Pursuant to
Section 906 Of The Sarbanes-Oxley Act of 2002**

In connection with the Quarterly Report of Hexion Inc. (the "Company") on Form 10-Q for the period ended September 30, 2017 as filed with the Securities and Exchange Commission on the date hereof (the "Report"), the undersigned, certify, pursuant to 18 U.S.C. Section 1350, as adopted pursuant to Section 906 of the Sarbanes-Oxley Act of 2002, that:

1. The Report fully complies with the requirements of Section 13(a) or 15 (d) of the Securities Exchange Act of 1934; and
2. The information contained in the Report fairly presents, in all material respects, the financial condition and results of operations of the Company.

/s/ Craig A. Rogerson

Craig A. Rogerson
Chief Executive Officer

/s/ George F. Knight

George F. Knight
Chief Financial Officer

November 14, 2017

November 14, 2017

A signed original of this statement required by Section 906 has been provided to Hexion Inc. and will be retained by Hexion Inc. and furnished to the Securities and Exchange Commission or its staff upon request.

