# Albemarle Corporation

Bernstein Strategic Decisions Conference May 30, 2018

Investor Presentation and Non-GAAP Reconciliations

▲ ALBEMARLE®

# Forward-Looking Statements

Some of the information presented in this presentation, the webcast and discussions that follow, including, without limitation, statements with respect to product development, changes in productivity, market trends, price, expected growth and earnings, input costs, surcharges, tax rates, stock repurchases, dividends, cash flow generation, costs and cost synergies, our portfolio, economic trends, supply and demand outlook, guidance and all other information relating to matters that are not historical facts may constitute forward-looking statements within the meaning of the Private Securities Litigation Reform Act of 1995. Actual results could differ materially from the views expressed.

Factors that could cause actual results to differ materially from the outlook expressed or implied in any forward-looking statement include, without limitation: changes in economic and business conditions; changes in financial and operating performance of our major customers and industries and markets served by us; the timing of orders received from customers; the gain or loss of significant customers; competition from other manufacturers; changes in the demand for our products or the end-user markets in which our products are sold; limitations or prohibitions on the manufacture and sale of our products; availability of raw materials; increases in the cost of raw materials and energy, and our ability to pass through such increases to our customers; changes in our markets in general; fluctuations in foreign currencies; changes in laws and government regulation impacting our operations or our products; the occurrence of regulatory proceedings, claims or litigation; the occurrence of cyber-security breaches, terrorist attacks, industrial accidents, natural disasters or climate change; hazards associated with chemicals manufacturing; the inability to maintain current levels of product or premises liability insurance or the denial of such coverage; political unrest affecting the global economy, including adverse effects from terrorism or hostilities; political instability affecting our manufacturing operations or joint ventures; changes in accounting standards; the inability to achieve results from our global manufacturing cost reduction initiatives as well as our ongoing continuous improvement and rationalization programs; changes in the jurisdictional mix of our earnings and changes in tax laws and rates; changes in monetary policies, inflation or interest rates that may impact our ability to raise capital or increase our cost of funds, impact the performance of our pension fund investments and increase our pension expense and funding obligations; volatility and uncertainties in the debt and equity markets; technology or intellectual property infringement, including cyber-security breaches, and other innovation risks; decisions we may make in the future; the ability to successfully execute, operate and integrate acquisitions and divestitures; and the other factors detailed from time to time in the reports we file with the SEC, including those described under "Risk Factors" in our Annual Report on Form 10-K and our Quarterly Reports on Form 10-Q. These forward-looking statements speak only as of the date of this presentation. We assume no obligation to provide any revisions to any forward-looking statements should circumstances change, except as otherwise required by securities and other applicable laws.



## Non-GAAP Financial Measures

It should be noted that Adjusted net income attributable to Albemarle Corporation ("Adjusted earnings"), Adjusted net income from continuing operations, Adjusted diluted earnings per share attributable to Albemarle Corporation, Adjusted diluted earnings per share from continuing operations, Adjusted effective income tax rates, segment operating profit, segment income, pro-forma net sales, net sales excluding the impact of foreign exchange translation ("ex FX"), EBITDA, Adj. EBITDA by operating segment, EBITDA margin, Adj. EBITDA margin, pro-forma Adj. EBITDA, pro-forma Adj. EBITDA margin, Adj. EBITDA excluding the impact of foreign exchange translation ("ex FX"), adj. EBITDA margin excluding the impact of foreign exchange translation ("ex FX"), net debt to Adj. EBITDA, gross debt to Adj. EBITDA, free cash flow, and Adjusted free cash flow are financial measures that are not required by, or presented in accordance with, accounting principles generally accepted in the United States, or GAAP. These measures are presented here to provide additional useful measurements to review our operations, provide transparency to investors and enable period-to-period comparability of financial performance. The Company's chief operating decision maker uses these measures to assess the ongoing performance of the Company and its segments, as well as for business and enterprise planning purposes.

A description of these and other non-GAAP financial measures that we use to evaluate our operations and financial performance, and reconciliation of these non-GAAP financial measures to the most directly comparable financial measures calculated and reported in accordance with GAAP, can be found in the Appendix to this presentation, which is posted in the Investors section of our website at <a href="www.albemarle.com">www.albemarle.com</a>, under "Non-GAAP Reconciliations" under "Financials." The Company does not provide a reconciliation of forward looking non-GAAP financial measures to the most directly comparable financial measures calculated and reported in accordance with GAAP, as the Company is unable to estimate significant non-recurring or unusual items without unreasonable effort. The amounts and timing of these items are uncertain and could be material to the Company's results calculated in accordance with GAAP.

# Albemarle Snapshot

Founded	1887
Global Employees	~5,400
Countries <sup>1</sup>	~100
Dividend Yield <sup>2</sup>	1.3%
Market Cap <sup>3</sup>	\$11.2B

#### **Financial Highlights**

Trailing Twelve Months Ended March 31, 2018

Net Sales	\$3.2B
Adj. EBITDA <sup>4,5</sup>	\$923M
Adi. EBITDA Margin <sup>5,6</sup>	29%

#### **Net Sales by Segment**

Trailing Twelve Months Ended March 31, 2018

## Providing innovative solutions to power the potential of energy efficiency



<sup>■</sup> Lithium 35% ■ Bromine Specialties 34% Catalysts 27% All Other

Based on destinations of FY2017 product sales.

<sup>&</sup>lt;sup>2</sup>\$100.11 closing price as of May 7, 2018; annualized dividend of \$1.34 per share announced May 7, 2018.

<sup>3 \$100.11</sup> closing price as of May 7, 2018; 111,867 million diluted shares outstanding as of March 31, 2018.

<sup>&</sup>lt;sup>4</sup> Non-GAAP measure. See Appendix for definition and Non-GAAP reconciliations.

<sup>&</sup>lt;sup>5</sup> Continuing operations only.

<sup>6</sup> Non-GAAP measure. Adjusted EBITDA margin calculated by dividing net sales by Adjusted EBITDA.

### Albemarle Path to Achieve Growth

#### 2016

Diversified specialty chemical company with strong free cash flow<sup>1</sup> to fund growth

Lithium Wave I & II: Expand current resources and BG conversion capacity

**Lithium Wave III: Explore new resources** 

**Bromine Specialties: Strong cash flow** 

Catalysts: Strengthen R&D and technology

Supported by Productivity and Operational Excellence

#### 2021

- 165,000 MT LCE annual capacity
- New Lithium resources in development with goal of 265,000 MT LCE capacity mid-2020s
- Strong free cash flow<sup>1</sup> to reinvest in growth businesses
- Ability to sustain margins in mature businesses
- Stronger overall product portfolio offering in refinery catalyst

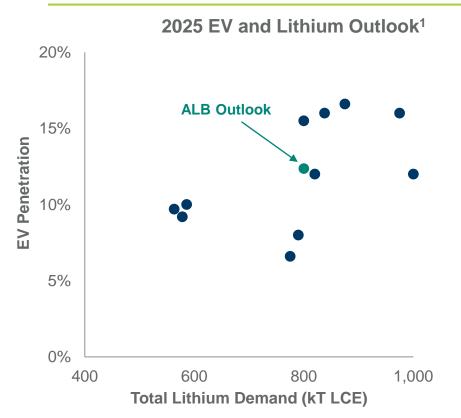
#### **CORPORATE GOALS**

Sales Growth: 7 – 10% annualized Adj. EBITDA Margins<sup>1</sup>: 32 – 35%

Every Part of the Portfolio Contributes to the Strategy



# Battery Markets Continue to Accelerate Lithium Demand



#### **Demand Buildup by Application**

Applications	2017 Demand	'17 – '25 CAGR	2025 Demand
Transportation	50	35%	550 ←
Consumer Electronics <sup>2</sup>	60	8%	110
All Other/Industrial	110	3 – 4%	140
Total	220	~18%	800

2025 Transportation Demand Buildup	% of Light Vehicles Sold	Vehicle Count (million)	Battery Size (KWh per Vehicle)	Lithium Demand (kT LCE)
BEV	6.7%	7.4	51	360
PHEV	5.6%	6.2	13	80
HEV	45%	50	0.6	30
e-buses, e-trucks, & other	N/A	<1	96	80
Total Transportation			·	550 —

- Lithium Content: 0.85 kg LCE/kWh for cathode; 0.10 kg LCE/kWh electrolyte
- Penetration figures based on 110 million light vehicles sold in 2025



# Long-term Relationships Required for EV Growth

# Recent VW Announcement



	Lithium Producer	Battery Manufacture	Auto Manufacture
Volume	140 kT LCE	150 GWh	3 Million EVs
Expansion Investment	\$2 – \$3 billion	\$9 – \$12 billion	\$20 – \$25 billion
Standard Customer Commitment	3 – 5 year contracts with cathode manufactures; up to 10 year agreements being discussed	3 – 5 year contracts with auto manufacture	7 – 10 year battery warranty with end consumer

- Recent announcement from Volkswagen for 2 3 million EVs by 2025 illustrates need for significant investment in value chain
- The desire to base load and secure future lithium requirements with limited number of suppliers incentivizes buyers to partner with capable and proven companies

Investment Decisions Being Made Across EV Supply Chain Today for Consumer Commitments in 2030s



# Albemarle the Partner of Choice in EV Battery Markets

#### Deep relationships

- Leading cathode/battery producers largely based in Asia
- Average ALB supply relationship of 10+ years
- Baseload volume, but not sole supplier

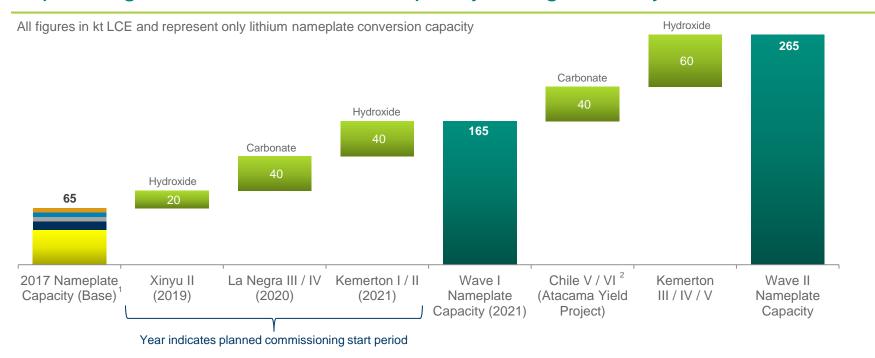
#### **Long-term Contracts**

- Minimum volumes that escalate each year
- Pricing floor with pricing upside opportunities
- Fully committed capacity through 2021
- Contracts provides attractive return on capital for Wave 1 expansion investments

#### Value-added Sale

- Chemical, physical and purity characteristics requiring specialized operating know-how
- Customer specific specifications
- Development of innovative new lithium materials with customers

## Expanding Lithium Conversion Capacity in High Quality Resources



#### Ramping as needed to meet demand of existing customers with ability to reduce spend rate based on 5-year outlook

NOTE: This slide contains the same data that was presented in March 2018 investor presentation with updated project nomenclature as capacity additions are in 20 kT LCE increments. 
¹Conversion capacity does not include approximately 10 kt LCE of technical grade spodumene to non-battery applications.

<sup>2</sup>Conversion site for Atacama Yield Project volume will be in Chile but specific city/location not yet determined.



# Disciplined Capital Allocation Strategy – Our Priorities

# Invest for Growth, Maintain Flexibility and Deliver Shareholder Value

# Invest for Growth in High Return Projects

 Strategically grow Lithium

# Disciplined M&A Strategy

 Must support or accelerate our strategy

# Maintain Investment Grade Rating

- Long-term Net Debt to Adjusted EBITDA<sup>1,2</sup> Target: 2.0x – 2.5x
- Short-term target lower to stay flexible for investment

## Fund Dividend Growth

 Increase dividend annually: 24 consecutive years since going public in 1994

#### Repurchase Shares

 When excess balance sheet capability available

<sup>&</sup>lt;sup>1</sup> Non-GAAP measure. See Appendix for definition and Non-GAAP reconciliations of historical measures. <sup>2</sup> Based on the bank covenant definition.

### Albemarle Is Well Positioned to Maximize Long-Term Shareholder Value Creation

- Multi-year journey has resulted in a more focused and growth-oriented portfolio underpinned by energy efficiency macro drivers
- Clear strategy with the people, cash generation and resources necessary to execute the strategy
- Experienced and focused management team with clear deliverables
- 4 Actively managing our portfolio in a disciplined and focused manner to drive shareholder value
- Strong balance sheet and disciplined approach to capital allocation with focus on highest returns (reinvestment, strategic acquisitions and returns to shareholders)



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# Appendix A

2018 Guidance and Business Snapshots



## Full Year 2018 Business Guidance vs 2017

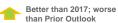
GBU	Prior Outlook	Updated Outlook	Business Environment
Lithium	•	•	<ul> <li>FY 2018 Adj. EBITDA¹ expected to increase by greater than 20% compared to 2017</li> <li>Expect 1H 2018 to be similar to 2H 2018 with 3Q 2018 lower due to La Negra II tie-in</li> <li>Favorable outlook driven by strong volume and price improvements, primarily in battery grade product portfolio</li> </ul>
Bromine Specialties	<b>\( \)</b>	1	<ul> <li>FY 2018 Adj. EBITDA¹ expected to be up low-to-mid single-digit vs prior year</li> <li>Improved outlook driven by solid demand for flame retardants partially offset by higher raw material and freight costs</li> </ul>
Catalysts <sup>2</sup>	•	•	<ul> <li>FY 2018 Adj. EBITDA¹ expected to increase mid-single-digit vs prior year² driven by higher volume, favorable product mix and higher pricing in FCC</li> <li>Outlook reduced due to raw material shortage in Curatives product line, potentially up to \$10 million unfavorable impact to Adj. EBITDA¹ in FY2018</li> </ul>

#### FY 2018 Adjusted EPS¹ Guidance Update: \$5.10 – \$5.40 per share

<sup>1</sup>Non-GAAP measure.

<sup>&</sup>lt;sup>2</sup>Guidance provided on pro forma basis to include the first quarter of 2018 and exclude the final nine months of 2017 financial contribution of Polyolefin Catalysts & Components business, which closed April 3, 2018.









# Lithium Snapshot

#### **TTM Financials**

Twelve Months Ended March 31, 2018

Net Sales \$1,101M

Adj. EBITDA<sup>1</sup> \$478M

Adj. EBITDA Margin<sup>1</sup> 43%

#### **Applications**

- Energy storage (Batteries)
- Glasses and Ceramics
- Greases and Lubricants
- Pharmaceutical Synthesis
- Polyolefins and Elastomers



#### **Characteristics**

- Mining and specialty chemicals capability
- Vertically integrated from natural resource to specialty performance products
- Low cost position globally

#### **Business Environment**

- Volume growth driven by energy storage
- Public policy accelerating e-mobility / renewables
- Battery cost declining / performance improving
- Long-term supply agreements becoming industry standard

#### Best-In-Class Resources Coupled with Derivatives Expertise Are Differentiators

<sup>&</sup>lt;sup>1</sup> Non-GAAP measure. See Appendix for definition and Non-GAAP reconciliations of historical measures.



# **Bromine Specialties Snapshot**

#### **TTM Financials**

Twelve Months Ended March 31, 2018

Net Sales \$862M

Adj. EBITDA<sup>1</sup> \$260M

Adj. EBITDA Margin<sup>1</sup> 30%

#### **Characteristics**

- Mineral extraction and processing
- · Low-cost position on global cost curve
- · Vertically integrated
- · Stable and sustainable cash flow

#### **Applications**



- Flame retardants for electronics and construction materials
- Completion fluids for oilfield
- Industrial water treatment
- Plastic and synthetic rubber
- Ag and pharma synthesis

#### **Business Environment**

- Stable flame retardants demand across electronics, construction and automotive
- Current completion fluid weakness due to oil prices, with a favorable and long-term outlook
- Excess bromine capacity is limited to few suppliers

Advantaged Position. Stable End Markets. Strong Sustainable Cash Flow.

<sup>&</sup>lt;sup>1</sup> Non-GAAP measure. See Appendix for definition and Non-GAAP reconciliations of historical measures.



# Catalysts Snapshot

TTM Financials		Characteristics							
Twelve Months Ended March 31  Net Sales  Adj. EBITDA <sup>1</sup> Adj. EBITDA Margin <sup>1</sup>	\$1,075M \$282M 26%	<ul> <li>Leading positions in FCC and HPC catalysts</li> <li>Technology and applications knowledge</li> <li>Focused on value creation for refiners</li> <li>Long-term, collaborative customer relationships</li> <li>High barriers-to-entry</li> <li>Strong free cash flow¹ generation with growth</li> <li>Safety, scale and technical service</li> </ul>							
Fluid Cracking Catalysts (FCC)	Clean Fuels Tec	chnology (CFT)	Polymer Catalyst Solutions (PCS)						
<ul><li>FCC Catalyst</li><li>Cracks oil feedstock</li><li>Makes gasoline</li><li>Makes propylene</li></ul>	<ul><li>Makes clean die</li><li>Makes clean oil-</li></ul>	feedstock nerization Catalyst	PCS Polymers Eco-tires Pharma Synthesis AG Chem Synthesis Coatings						

Leadership in FCC and HPC catalysts with High Margin Business with High Barriers-to-Entry

<sup>&</sup>lt;sup>1</sup>Non-GAAP measure. See Appendix for definition and Non-GAAP reconciliations of historical measures.



# Appendix B

Non-GAAP Reconciliations and Supplemental Information



# Adjusted EBITDA - by Segment (three months ended March 31)

(\$ in thousands)	 Lithium	Bre	omine Specialties	Catalysts	 Reportable Segments Total	All Other	Corporate	Cons	olidated Total
Three months ended March 31, 2018:									
Net income (loss) attributable to Albemarle Corporation	\$ 108,334	\$	59,536	\$ 55,660	\$ 223,530	\$ 1,760	\$ (93,530)	\$	131,760
Depreciation and amortization	24,065		10,433	12,170	46,668	2,102	1,560		50,330
Non-recurring and other unusual items	(1,385)		_	_	(1,385)	_	36,311		34,926
Interest and financing expenses	_		_	_	_	_	13,538		13,538
Income tax expense	_		_	_	_	_	20,361		20,361
Non-operating pension and OPEB items	 			 _	_	_	 (2,197)		(2,197)
Adjusted EBITDA	\$ 131,014	\$	69,969	\$ 67,830	\$ 268,813	\$ 3,862	\$ (23,957)	\$	248,718

See above for a reconciliation of adjusted EBITDA on a segment basis, the non-GAAP financial measure, to Net income attributable to Albemarle Corporation ("earnings"), the most directly comparable financial measure calculated and reporting in accordance with GAAP. EBITDA is defined as earnings before interest and financing expenses, income taxes, and depreciation and amortization. Adjusted EBITDA is defined as EBITDA and the non-recurring, other unusual and non-operating pension and OPEB items as listed above.



# Adjusted EBITDA - Margin by Segment (three months ended March 31)

(\$ in thousands)	ı	ithium	В	Bromine Specialties	Catalysts	Reportable Segments Total	All Other	С	onsolidated Total
Three months ended March 31, 2018:									
Net sales	\$	298,032	\$	225,639	\$ 260,717	\$ 784,388	\$ 37,165	\$	821,629
Net income (loss) attributable to Albemarle Corporation		36.3%		26.4%	21.3%	28.5%	4.7%		16.0%
Depreciation and amortization		8.1%		4.6%	4.7%	5.9%	5.7%		6.1%
Non-recurring and other unusual items		(0.5)%		—%	—%	(0.2)%	—%		4.3%
Interest and financing expenses		-%		-%	-%	—%	—%		1.7%
Income tax expense		-%		—%	-%	—%	—%		2.5%
Non-operating pension and OPEB items		-%		—%	-%	—%	-%		(0.3)%
Adjusted EBITDA Margin		44.0%		31.0%	26.0%	34.3%	10.4%		30.3%

See above for adjusted EBITDA margin, a non-GAAP financial measure defined as adjusted EBITDA divided by net sales. See slide 23 for the related reconciliation of adjusted EBITDA on a segment basis, the non-GAAP financial measure, to Net income attributable to Albemarle Corporation ("earnings"), the most directly comparable financial measure calculated and reporting in accordance with GAAP.

Consolidated Total includes net sales from Corporate (not shown) of \$76 and \$666 in the three months ended March 31, 2018 and 2017, respectively.



# Adjusted EBITDA - Continuing Operations (twelve months ended)

	Twelve Months Ended									
(\$ in thousands)		Mar 31, 2017		Jun 30, 2017		Sep 30, 2017		Dec 31, 2017		Mar 31, 2018
Continuing Operations										
Net income attributable to Albemarle Corporation	\$	466,702	\$	884,856	\$	875,306	\$	54,850	\$	135,397
Depreciation and amortization		192,436		191,853		193,774		196,928		202,188
Non-recurring and other unusual items (excluding items associated with interest expense)		77,103		88,866		89,214		102,660		101,914
Interest and financing expenses		118,580		117,370		117,216		115,350		60,375
Income tax expense		82,749		82,223		88,324		431,817		440,207
Income from discontinued operations (net of tax)		(184,819)		(583,159)		(559,974)		_		_
Non-operating pension and OPEB items		24,809		24,021		23,224		(16,125)		(17,259)
Adjusted EBITDA	\$	777,560	\$	806,030	\$	827,084	\$	885,480	\$	922,822
Pro-forma: Net impact of adjusted EBITDA from divested businesses		(1,346)		(761)	_	525		_		
Pro-forma Adjusted EBITDA	\$	776,214	\$	805,269	\$	827,609	\$	885,480	\$	922,822
Net Sales	\$	2,742,055	\$	2,809,986	\$	2,910,842	\$	3,071,976	\$	3,171,542
Pro-forma: Net impact of adjusted EBITDA from divested businesses		(12,435)		470		_		_		_
Pro-forma Net Sales	\$	2,729,620	\$	2,810,456	\$	2,910,842	\$	3,071,976	\$	3,171,542
Pro-forma Adjusted EBITDA Margin		28%		29%		28%		29%		29%

See above for a reconciliation of adjusted EBITDA, and pro-forma adjusted EBITDA, the non-GAAP financial measures, to Net income attributable to Albemarle Corporation, the most directly comparable financial measure calculated and reported in accordance with GAAP. EBITDA is defined as Net income attributable to Albemarle Corporation before interest and financing expenses, income taxes, depreciation and amortization. Adjusted EBITDA is defined as EBITDA before discontinued operations and the non-recurring, other unusual and non-operating pension and OPEB items as listed below. Proforma adjusted EBITDA is defined as adjusted EBITDA before the net impact of EBITDA from divested businesses.

See above for a reconciliation of pro-forma net sales, the non-GAAP financial measure, to net sales, the most directly comparable financial measure calculated and reported in accordance with GAAP. Proforma net sales is defined as net sales before the net impact of net sales from divested businesses.



# Adjusted EBITDA - by Segment (twelve months ended)

					Tw	elve Months Ende	t		
(\$ in thousands)		Mar 31, 2017		Jun 30, 2017		Sep 30, 2017		Dec 31, 2017	Mar 31, 2018
Lithium	_								
Net income attributable to Albemarle Corporation	\$	232,120	\$	271,810	\$	314,707	\$	342,992	\$ 373,712
Depreciation and amortization		86,439		85,882		86,409		87,879	92,879
Non-recurring and other unusual items		3,173		15,094		15,977		15,781	 11,223
Adjusted EBITDA	_	321,732		372,786		417,093		446,652	477,814
Net Sales		748,521		834,629		937,461		1,018,885	1,100,688
Adjusted EBITDA Margin		43%		45%		44%		44%	43%
Bromine Specialties									
Net income attributable to Albemarle Corporation	\$	194,205	\$	189,197	\$	201,336	\$	218,839	\$ 219,681
Depreciation and amortization		39,601		40,122		40,112		40,062	40,701
Adjusted EBITDA		233,806		229,319		241,448		258,901	260,382
Net Sales		815,063		812,145		830,572		855,143	861,591
Adjusted EBITDA Margin		29%		28%		29%		30%	30%
Catalysts									
Net income attributable to Albemarle Corporation	\$	257,087	\$	243,858	\$	216,405	\$	230,665	\$ 229,359
Depreciation and amortization		51,557		52,105		53,160		54,468	53,855
Non-recurring and other unusual items		_		_		(1,250)		(1,250)	(1,250)
Adjusted EBITDA		308,644		295,963		268,315		283,883	281,964
Net Sales		1,034,867		1,039,470		1,019,593		1,067,572	1,074,731
Adjusted EBITDA Margin		30%		28%		26%		27%	26%

See above for a reconciliation of adjusted EBITDA on a segment basis, the non-GAAP financial measure, to Net income attributable to Albemarle Corporation ("earnings"), the most directly comparable financial measure calculated and reporting in accordance with GAAP. EBITDA is defined as earnings before interest and financing expenses, income taxes, and depreciation and amortization. Adjusted EBITDA is defined as EBITDA before the non-recurring, other unusual and non-operating pension and OPEB items as listed above.

