

# SHAWCOR LTD.

# **ANNUAL INFORMATION FORM**

For The Year Ended December 31, 2016

March 24, 2017

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# Item 1 NOTICE REGARDING FORWARD-LOOKING INFORMATION

This annual information form ("AIF") includes certain statements that reflect management's expectations and objectives for Shawcor Ltd.'s (the "Company") future performance, opportunities and growth, which statements constitute forward-looking information under applicable securities laws. Such statements, other than statements of historical fact, are predictive in nature or depend on future events or conditions. Forward-looking information involves estimates, assumptions, judgments and uncertainties. These statements may be identified by the use of forward-looking terminology such as "may", "will", "should", "anticipate", "expect", "believe", "predict", "estimate", "continue", "intend", "plan" and variations of these words or other similar expressions. Specifically, this AIF includes forwardlooking information in the "Trends" section hereof and elsewhere including in respect of, among other things, the impact of global economic activity on the demand for the Company's products as well as the prices of commodities used by the Company, the impact of the decline in global oil and gas commodity prices on the level of industry investment in oil and gas infrastructure, the impact of changing energy demand, supply and prices, the timing of major project activity, the outlook for revenue and operating income and the expected development of the Company's order backlog and contract bidding activity, the use of proceeds from the Company's December 2016 equity offering, the sufficiency of resources, capacity and capital to meet market demand, to meet contractual obligations and to execute the Company's development and growth strategy, the level of dependency on a single customer or group of customers, the sufficiency of the Company's human resources, systems and processes to operate its business and execute its strategic plan, the impact of existing order backlogs and other factors on the Company's revenues and operating income, the impact of any potential cancellation of contracts included in the order backlog, the impact and likelihood of changes in competitive conditions in the markets in which the Company participates, the impact of instability in Argentina, Azerbaijan, Mexico and other developing countries, the impact of changing laws for environmental compliance on the Company's capital and operating costs, earnings and competitive position and the adequacy of the Company's existing accruals in respect thereof, the Company's relationships with its employees, the continued establishment of international operations, the effect of continued development in emerging economies, as well as the Company's plans as they relate to research and development activities and the maintenance of its current dividend policies.

Forward-looking information involves known and unknown risks and uncertainties that could cause actual results to differ materially from those predicted by the forward-looking information. We caution readers not to place undue reliance on forward looking information as a number of factors could cause actual events, results and prospects to differ materially from those expressed in or implied by the forward looking information. Significant risks facing the Company include, but are not limited to: the impact on the Company of reduced demand for its products and services as a result of lower investment in global oil and gas extraction and transportation activity following the significant decline in the global price of oil and gas in the fourth quarter of 2014 and throughout 2015 and 2016; long term changes in global or regional economic activity and changes in energy supply and demand which impact on the level of drilling activity and pipeline construction; exposure to product and other liability claims; potential restrictions on the ability of the Company to refinance existing debt obligations prior to or on maturity; shortages of or significant increases in the prices of raw materials used by the Company; compliance with

environmental, trade and other laws; political, economic and other risks arising from the Company's international operations; fluctuations in foreign exchange rates, as well as other risks and uncertainties, as more fully described herein under the heading "Risk Factors".

These statements of forward-looking information are based on assumptions, estimates and analysis made by management in light of its experience and perception of trends, current conditions and expected developments as well as other factors believed to be reasonable and relevant in the circumstances. These assumptions include those in respect of global oil and gas prices, global economic recovery, the potential for increased investment in global energy infrastructure, the Company's ability to execute projects under contract and to successfully bid for new contracts, the continued supply of and stable pricing for commodities used by the Company, the availability of personnel resources sufficient for the Company to operate its businesses, the maintenance of operations in major oil and gas producing regions and the ability of the Company to satisfy all covenants under its credit facilities and long term debt. The Company believes that the expectations reflected in the forward-looking information are based on reasonable assumptions in light of currently available information. However, should one or more risks materialize or should any assumptions prove incorrect, then actual results could vary materially from those expressed or implied in the forward-looking information included in this AIF and the Company can give no assurance that such expectations will be achieved.

To the extent any forward-looking information in this document constitutes future-oriented financial information or financial outlooks within the meaning of securities laws, such information is being provided to demonstrate the potential of the Company and readers are cautioned that this information may not be appropriate for any other purpose. Future-oriented financial information and financial outlooks, as with forward-looking information generally, are based on the assumptions and subject to the risks noted above.

When considering the forward looking information in making decisions with respect to the Company, readers should carefully consider the foregoing factors and other uncertainties and potential events. Shawcor Ltd. does not assume the obligation to revise or update forward looking information after the date of this AIF or to revise it to reflect the occurrence of future unanticipated events, except as may be required under applicable securities laws.

#### **CURRENCY**

All references in this document to "\$" are to Canadian dollars unless noted otherwise.

# Item 2 CORPORATE STRUCTURE

# 2.1 Name, Address and Incorporation

Shawcor Ltd. ("Shawcor" or the "Company") was originally incorporated under the laws of Canada in 1968 as Shaw Pipe Industries Ltd. and was continued under the *Canada Business Corporations Act* in 1980 at which time it adopted the name Shaw Industries Ltd. Two subsidiaries, Shaw Pipe Protection Limited, which was originally incorporated in 1954, and ShawFlex Inc., which was originally incorporated in 1960, were amalgamated with the Company

under the *Canada Business Corporations Act* effective January 1, 1991 and January 1, 1994, respectively. Effective May 4, 2001, the Company adopted its present name.

Additional amendments made to the articles of the Company since its amalgamation on January 1, 1994 include a subdivision of the Company's outstanding shares on a three for one basis, effected in 1998; an amendment empowering the Board of Directors to appoint additional directors, effected in 2002; and the imposition of certain restrictions on the issuance of additional Class B Multiple Voting Shares, effected in 2004.

On March 20, 2013, the Company and Seaborn Acquisition Inc. amalgamated pursuant to a Plan of Arrangement. Pursuant to this Plan of Arrangement, the Company's dual class share structure, which had consisted of Class A Subordinate Voting Shares (having one vote per share) and Class B Multiple Voting Shares (having ten votes per share), was eliminated and its authorized and issued capital now consists solely of common shares. Additional information concerning the Plan of Arrangement and the elimination of the Company's dual class share structure is included in the Company's management proxy circular dated February 11, 2013 which is filed on SEDAR at <a href="https://www.sedar.com">www.sedar.com</a>. Effective January 1, 2015, the Company amalgamated with its subsidiary, 9098658 Canada Inc., and immediately thereafter, the resultant company amalgamated with two subsidiaries, Flexpipe Systems Inc. and Shaw Pipe Protection Limited, in each case under the Canada Business Corporations Act.

The address of the Company's head and registered office is 25 Bethridge Road, Toronto, Ontario, Canada, M9W 1M7.

Unless the context requires otherwise, the term "Company" herein refers to Shawcor and its subsidiaries.

## 2.2 Intercorporate Relationships

#### PRINCIPAL SUBSIDIARIES AND AFFILIATES

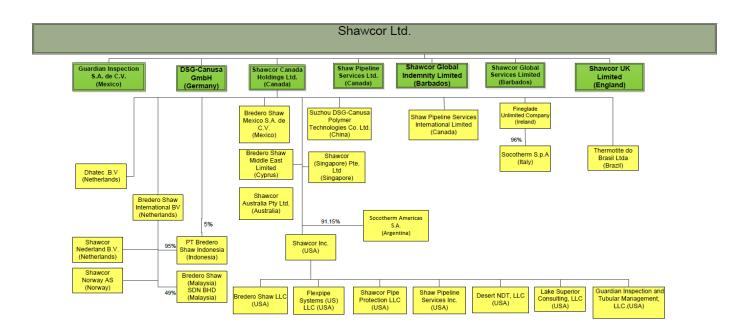
The following table lists the Company's principal subsidiaries and affiliates (affiliates being corporations in which Shawcor has a significant non-controlling equity interest) as at March 1, 2017 including the jurisdiction of incorporation and the percentage of voting securities held by Shawcor or its subsidiaries:

Name	Jurisdiction of Incorporation	Percentage Owned
Bredero Shaw (Malaysia) SDN BHD	Malaysia	49
Bredero Shaw Middle East Limited	Cyprus	100
Bredero Shaw International BV	The Netherlands	100
Bredero Shaw LLC	Delaware	100

Name	Jurisdiction of Incorporation	Percentage Owned
Bredero Shaw Mexico S.A. de C.V.	Mexico	100
Shawcor Norway AS	Norway	100
Desert NDT, LLC	Delaware	100
Dhatec B.V.	The Netherlands	100
DSG-Canusa GmbH	Germany	100
Fineglade Unlimited Company	Ireland	100
Flexpipe Systems (US) LLC	Delaware	100
Guardian Inspection and Tubular Management LLC	Delaware	100
Guardian Inspection S.A. de C.V.	Mexico	100
Lake Superior Consulting, LLC	Wisconsin	100
PT Bredero Shaw Indonesia	Indonesia	100
Shaw Pipeline Services Inc.	Texas	100
Shaw Pipeline Services International Limited	Canada	100
Shaw Pipeline Services Ltd.	Alberta	100
Shawcor Netherland B.V.	The Netherlands	100
Shawcor (Singapore) Pte. Ltd.	Singapore	100
Shawcor Australia Pty Ltd.	Australia	100
Shawcor Canada Holdings Ltd.	Canada	100
Shawcor Global Indemnity Limited	Barbados	100
Shawcor Global Services Limited	Barbados	100
Shawcor Inc.	Nevada	100
Shawcor Pipe Protection LLC	Delaware	100
Shawcor UK Limited	England	100
Socotherm Americas S.A.	Argentina	92
Socotherm S.p.A.	Italy	96

Name	Jurisdiction of Incorporation	Percentage Owned
Suzhou DSG-Canusa Polymer Technologies Co. Ltd.	China	100
Thermotite do Brasil Ltda	Brazil	100

The following chart illustrates the ownership structure of Shawcor and its principal subsidiaries and affiliates as at March 1, 2017:



March 1, 2017

# Item 3 GENERAL DEVELOPMENT OF THE BUSINESS, 2014 - 2016

## 3.1 Overview

During the period 2014 - 2016, the Company continued its global participation among energy services companies serving the pipeline, pipe services, petrochemical and industrial segments of the oil and gas industry and other industrial markets.

The Company benefitted from very strong market demand for its products and services during the period preceding the decline in global oil prices, which commenced in the second half of 2014. The Company achieved record revenue in each of 2013 and 2014 as a result of the execution of a number of large pipe coating projects offshore of Australia and in the Company's Europe, Middle East, Africa and Russia ("EMAR") region. Supporting this strong project activity in the Asia Pacific and EMAR region were both organic growth and the addition of revenue from acquisitions in a number of the Company's business units. However, commencing in the fourth quarter of 2014 and continuing through 2016, the Company's operations were negatively impacted by the significant decline in global oil and gas prices which in turn has reduced the capital expenditures and the number of and timing of new energy projects undertaken by the Company's customers.

In 2014, consolidated revenue increased by \$42.4 million, or 2% from 2013, to once again reach a record level of \$1,890.0 million. Higher revenue was due to an increase of \$29.0 million in the Pipeline and Pipe Services segment and an increase of \$14.6 million in the Petrochemical and Industrial segment. In the Pipeline and Pipe Services segment, the mid-year acquisition of Desert NDT, increased revenue from the manufacture and sale of Flexpipe composite pipe, and increased pipe coating project revenue at the Company's EMAR region and Latin American pipe coating operations offset lower revenue in the Asia Pacific region due to the completion of the Chevron Wheatstone and Inpex Ichthys pipe coating projects. Income from operations decreased to \$148.7 million from \$323.5 million in 2013 and net income (attributable to shareholders of the Company) decreased to \$94.9 million or earnings per share of \$1.53 on a fully diluted basis versus \$219.9 million or \$3.51 per share, respectively, in 2013. Impacting both income from operations and net income (attributable to shareholders of the Company) were impairment charges recorded in 2014 of \$120.4 million (\$99.4 million net of tax) related to the write-down of long-lived assets in the Gulf of Mexico, Brazil and Venezuela. Also impacting net income was a reduction in operating margins due to the change in product mix associated with the completion of the Asia Pacific projects and the ramp up of activity levels in the EMAR region.

In 2015, consolidated revenue decreased by \$79 million, or 4% from 2014, to \$1,810.6 million. The year over year decrease in revenue was due to a reduction of \$86 million in the Pipeline and Pipe Services segment that offset a small increase in the Petrochemical and Industrial segment. In the Pipeline and Pipe Services segment, revenue was negatively affected by the continuing decline in global oil and gas prices that started in the fourth quarter of 2014 and which impacted the Company's businesses in two distinct ways. In North America, the number of operating drilling rigs declined by over 60% with a resulting decrease in demand for Shawcor's businesses that generate revenue from customer expenditures on the drilling and completion of wells. Outside of North America, lower oil and gas prices resulted in the curtailment in large oil and

gas greenfield development projects which has negatively impacted revenue from large pipe coating projects in Asia Pacific and Latin America. Partially offsetting the impact of market weakness was the full year of inclusion in 2015 of the Shawcor Inspection Services (formerly Desert NDT) girth weld inspection business and the ramp up of activity levels associated with the execution of the Shah Deniz and South Stream pipe coating projects in the EMAR region.

Income from operations increased marginally to \$149.4 million in 2015 from \$148.7 million in 2014 and net income (attributable to shareholders of the Company) also increased marginally to \$98.2 million or earnings per share of \$1.52 on a fully diluted basis versus \$94.9 million or \$1.53 per share, respectively, in 2014. The minimal changes in both income from operations and net income (attributable to shareholders of the Company) reflected reduced revenue and operating margins associated with the decline in activity in 2015 versus 2014 that were offset by the reduction in impairment charges with the recording in 2014 of \$120.4 million (\$99.4 million net of tax) in write-downs of certain long-lived assets in the Gulf of Mexico, Brazil and Venezuela.

In 2016, Shawcor's financial results continued to decline as the downturn in the energy services industry persisted and activity weakened in each of the Pipeline and Pipe Services segment regions. Revenue declined by 33 percent in 2016 to \$1.20 billion, the result of lower capital spending on global pipeline infrastructure projects and reduced demand for oilfield services in North America. The lower activity in the Pipeline and Pipeline Services segment was partially offset by strong growth in the Petrochemical and Industrial segment, which was challenged to keep pace with customer demand. Income from operations decreased from \$149.4 million in 2015 to a loss of \$171.1 million as a result of reduced gross profit from the revenue decline and impairment charges of \$157.3 million. Net earnings per share declined from \$1.52 (diluted) in 2015 to a loss per share of (\$2.80) in 2016.

During the three year period, the Company has continued to focus on implementing industry leading operational systems and processes and the development of new product innovations. In 2014, the Company developed XTremeTemp<sup>TM</sup>, a new high temperature insulation coating for sub-sea applications, a Mobile Lathe Plant that takes factory level machining to the field and NEMO, which is an advancement in field joint coating with increased temperature and flexibility. In 2015, the Company developed the next generation Automated Ultrasonic (AUT) inspection platform, with increased resolution accuracy and advanced imaging capabilities, for verification of pipeline weld integrity in offshore applications, and READDI, which is real time data transmission of field acquired girth weld data. In 2016, the Company developed a new high temperature coating for on-shore applications and expanded the real time data transmission of field data to the IntelliCOAT system.

Shawcor has also continued its emphasis on employee safety over the three year period through the Incident and Injury Free Program. Total recordable incidents due to injury of 4.5 to 7 incidents per million person hours have been experienced over the three year period, an injury rate which is significantly better than industry standards.

# 3.2 **Specific Highlights**

Specific highlights in the development of the Company's business over the 2014 - 2016 period include:

# <u>2014</u>

- In February 2014, the Company's Socotherm pipe coating division received a contract from Tenaris with a value in excess of US\$40 million to provide pipeline coating for the Moho Nord Oil Pipeline project off the Congo coast in West Africa. The contract was executed at the Socotherm pipe coating facility in Pozzallo, Italy.
- In February and June 2014, the Company's Bredero Shaw pipe coating division received contracts from Europipe GmbH and Marubeni Sumitomo Consortium with a combined value of approximately US\$100 million for pipeline coatings for Line 1 and 2 of the South Stream Offshore Pipeline; and, in July 2014 the Canusa-CPS division received a contract with a value of approximately C\$30 million from Saipeim SpA to provide field joint coating services for Line 1 of the South Stream project. In December 2014, based on suspension notices or other information received from its customers, the majority of the work on the South Stream contracts with Europipe, Marubeni Sumitomo and Saipeim was suspended, but not terminated. Approximately 20% of the expected revenue from these contracts had been generated to the date of suspension. Subsequently, in June 2015, work resumed on the Line 1 contract and is now completed.
- In May 2014, William Buckley retired as Chief Executive Officer of the Company and was succeeded as Chief Executive Officer by then President, Stephen Orr.
- In May 2014, the Company's Bredero Shaw Pipe coating division received a contract with a value of approximately US\$70 million from BP Exploration (Shah Deniz) Ltd. for and on behalf of the South Caucasus Pipeline Company Ltd. for coating services for the South Caucasus Pipeline Expansion (SCPX) project. The execution of this contract was completed at the Bredero Shaw Ras Al Khaimah facility.
- In June 2014, the Company filed a final short form base prospectus for the offering of up to \$500 million of common shares and other securities of the Company which may be offered from time to time during the 25 month period for which the prospectus remains valid.
- In June 2014, the Company exercised the option under its Unsecured Committed Bank Credit Facility (the "Credit Facility") to increase the credit limit thereunder from US\$250 million to US\$400 million. The Credit Facility was also amended to provide the Company the option to increase the credit limit thereunder to US\$550 million, with the consent of the lenders.
- In July 2014, the Company completed the acquisition of all of the outstanding shares of Desert NDT LLC for a total consideration of approximately US\$264 million, subject to adjustment for changes in working capital. Desert (now Shawcor Inspection Services) is a Houston-based provider of non-destructive testing services for new oil and gas gathering

- pipelines and infrastructure integrity management services. Shawcor Inspection Services operates through multiple branches located in major U.S. oil and gas basins.
- In September 2014, the Company announced that as a result of anticipated changes in Petrobras' development plans for the pre-salt Santos basin, it would incur an impairment charge of up to \$30 million relating primarily to goodwill and intangible assets that arose from the 2010 purchase of the Company's joint venture partners in Thermotite do Brasil Ltda. The final after-tax impairment charge of \$29.4 million was recorded in the third quarter of 2014.
- In September 2014, the Company closed a bought public offering of 3,650,000 common shares at a price of \$54.85 per share for gross proceeds of \$200,202,500. To cover overallotments, the underwriters of the public offering were granted an option to purchase up to an additional 547,500 common shares at the offering price. This option was exercised in October 2014, which increased the total gross proceeds of the offering to \$230,232,875. The Company used the net proceeds from the offering for general corporate purposes, including to repay a portion of its outstanding revolving debt in the normal course in order to create debt availability to fund future corporate investments.
- In September 2014, the Company's Bredero Shaw pipe coating division received contracts with a value of approximately US\$200 million from BP Exploration (Shah Deniz) Ltd. for pipe coating and other services in connection with the Shah Deniz Stage 2 development project. The contracts were executed from plants within Bredero Shaw's EMAR region and are now completed.
- In November 2014, the Company's Bredero Shaw pipe coating division received a second contract with a value of approximately US\$200 million from BP Exploration (Shah Deniz) Ltd. for pipeline coating for the Shah Deniz Stage 2 development project. The contract was executed at the Caspian Pipe Coatings plant in Baku, Azerbaijan and is now completed.
- In December 2014, the Company announced an expected after tax impairment charge of up to approximately \$80 million relating to the goodwill and intangible assets of the Socotherm Gulf of Mexico coating facility in Channelview, Texas and the carrying value of Socotherm's 50% joint venture interest in Venezuela. The final impairment charge of \$70 million net of tax was recorded in the fourth quarter of 2014. The write down of the Socotherm Gulf of Mexico facilities' goodwill and intangible assets was based primarily on two factors: (i) anticipated market developments in the Gulf of Mexico including the likelihood of project delays as a result of the global decline in oil prices; and (ii) the Company's intention to shift non-Gulf of Mexico production from the Channelview operation to Pozzallo, Italy following the successful launch of production at the Pozzallo facility, which was better positioned logistically to service project activity in Europe, the Middle East and Africa. The write down of the joint venture interest in Venezuela was primarily the result of the accelerating devaluation of the local currency in Venezuela. These write downs represented a non-cash charge that will not impact the Company's ability to generate revenue from the Gulf of Mexico or Venezuela operations.

# <u>2015</u>

- In January 2015, the Company completed the acquisition of Dhatec B.V. Dhatec is a Netherlands based company which designs, assembles and markets engineered pipe logistics products and services which mitigate damage and enhance safety and efficiency in the manufacturing, coating, handling, transportation, preservation and storage of pipe.
- In April 2015, the Company received two pipe coating contracts for approximately US\$55 million from Tenaris to provide three layer polyethylene anti-corrosion pipeline coatings for the first and second phase of the Argentina Northeast Gas Pipeline (GNEA) project. The coating for both phases of the project has been completed.
- In July 2015, the following 8 divisions/operating units co-located in a "sales super center" in downtown Calgary: Canusa-CPS, DSG-Canusa, Flexpipe Systems, Guardian, Shawcor CSI, Shaw Pipe Protection, Shaw Pipeline Services and ShawFlex. The new location hosts over 50 key sales, customer facing and support employees and will enable fully integrated customer solutions to address the Company's customers' most important challenges.
- In November 2015, the Company completed the acquisition of the assets of the Tubular Inspection and Management and Global Poly businesses operated by Flint Field Services Ltd. for C\$35.5 million, subject to working capital adjustments. These businesses operated from five owned and five leased facilities in Alberta, British Columbia and Saskatchewan. The 2015 revenue for these acquired businesses was approximately C\$46 million.
- On December 31, 2015, Mr. John Petch, the Chair of the Company's Board of Directors, retired. Mr. Petch had been a director of the Company since 2005 and its Chair since 2013. The Board appointed Mr. Paul Robinson as its new Chair, effective January 1, 2016. Mr. Robinson joined the Shawcor Board in 2001 and served as its Audit Committee Chair for many years.

## 2016

- In January 2016, the Company acquired the units of Lake Superior Consulting, LLC ("Lake Superior"). Lake Superior is a Duluth, Minnesota based professional services firm, specializing in pipeline engineering and integrity management services to major pipeline operators. The business operates from facilities in Minnesota, Texas, Nebraska, Kansas and North Dakota, provides pipeline design, engineering, inspection and commissioning as well as integrity management services, and had 2015 revenue of approximately US\$45 million.
- In April 2016, the Company utilized a portion of its existing cash balances to repurchase US\$75 million of its Senior Notes at a purchase price of US\$75.75 million plus accrued interest.

• In May 2016, Shawcor entered into amending agreements with its Senior Note holders and the syndicate of lenders under the Credit Facility.

The principal amendments to the agreements with the Senior Note holders and to the Credit Facility were:

- a) an increase in the Company's permitted Total Debt to EBITDA covenant (the "Leverage Ratio") (then a maximum of 3.00 to 1.00) to 4.25 to 1.00 for the fiscal quarters ending September 30, 2016 and December 31, 2016;
- b) at the Company's option, an increase in the Leverage Ratio to 3.75 to 1.00 and 3.5 to 1.00 for the quarters ending March 31, 2017 and June 30, 2017, respectively;
- c) increased interest rates and standby and other fees payable to Senior Note holders and under the Credit Facility during any period when the Company is permitted an increased Leverage Ratio (an "Increased Leverage Period");
- d) a reduction in the size of the Credit Facility from US\$400 million to US\$325 million; and
- e) a change to the definition of Total Debt, which currently excludes up to US\$75 million in letters of credit which are performance guarantees ("Performance Guarantees"), to exclude up to US\$100 million in Performance Guarantees on a permanent basis and up to US\$150 million in Performance Guarantees on a temporary basis during any Increased Leverage Period.
- In July 2016, the Company was awarded a conditional contract with a value in excess of C\$300 million from Infraestructura Marina del Golfo (IMG), a Mexican company majority-owned by TransCanada Corporation and partially owned by IEnova, for pipeline coating for the CFE Sur de Texas Tuxpan gas pipeline project, a 690 km offshore pipeline that will run from the USA/Mexico international border near Brownsville, Texas to a location near Tuxpan, Mexico. The contract will be executed from 2 coating plants in Altamira, Mexico and involves the application of concrete weight coating. Coating has commenced with completion expected by early 2018.
- At September 30, 2016, the Company recorded impairment charges totalling \$155.9 million to recognize the impairment in property plant and equipment and intangible assets at Socotherm Italy of \$41.3 million, goodwill at Shawcor Inspection Services (formerly Desert NDT) of \$108.9 million, and various assets at Shawcor CSI of \$5.6 million. In each case the impairment charges resulted from uncertainties regarding future activity levels and the resulting future cash flows for the respective businesses.
- In December 2016, Shawcor entered into amending agreements with its Senior Note holders and the syndicate of lenders under the Credit Facility. The principal amendments to the previously existing agreements with the Senior Note holders and to the Credit Facility are:

- a) an extension of the term of the Credit Facility from March 20, 2018 to December 6, 2019 and a reduction in the size of the Credit Facility from US\$325 million to US\$317 million;
- b) the elimination of the requirement for the Company to meet a Total Debt to EBITDA covenant (the "Leverage Ratio") for the quarter ending December 31, 2016 ("Q4 2016");
- c) the creation of a minimum EBITDA covenant of C\$15 million in respect of Q4 2016;
- d) an increase in the maximum Leverage Ratio to 3.50 to 1.00 and 3.25 to 1.00 for the quarters ending March 31, 2017 ("Q1 2017") and June 30, 2017 ("Q2 2017"), respectively; with EBITDA for Q1 2017 to be calculated by multiplying the EBITDA for such quarter by 4 and with EBITDA for Q2 2017 to be calculated by adding the EBITDA for Q1 2017 and the EBITDA for Q2 2017 and then multiplying such sum by 2;
- e) a decrease in the minimum Interest Coverage Ratio/Fixed Charge Ratio (then 2.5 to 1.0) to 1.5 to 1.0 for Q4 2016;
- f) an amendment to the method of calculation of the Interest Coverage Ratio/Fixed Charge Ratio for Q1 2017 and Q2 2017 such that each of the components of such ratio (EBITDA, interest expense and rental payments) is calculated on a basis similar to the calculation of the Leverage Ratio for such quarters; and
- g) increased interest rates and standby and other fees payable to Senior Note holders and under the Credit Facility during Q4 2016 and in any period when the Company is permitted an increased Leverage Ratio.
- In December 2016, the Company utilized a portion of its available Credit Facility to repurchase US\$75 million of its Senior Notes at a price of US\$75 million. Following that repurchase, Shawcor had approximately US\$196.8 million in Senior Notes outstanding, approximately C\$135.5 million in cash and cash equivalents and approximately C\$228.4 million of unutilized credit facilities (net of standard letters of credit for performance, bid and other bonds of approximately C\$93 million). The Company incurred fees and expenses of approximately US\$2.1 million in Q4 2016 to implement these amendments and the extension of the Credit Facility.
- In December 2016, the Company closed a bought public offering of 4,575,000 common shares at a price of \$32.80 per share for gross proceeds of \$150,060,000. To cover overallotments, the underwriters of the public offering were granted an option to purchase up to an additional 686,250 common shares at the offering price. This option was exercised in December 2016, which increased the total gross proceeds of the offering to approximately \$173 million. The Company anticipates using the net proceeds from the offering to facilitate investments in working capital related to booked and potential future orders for large pipe coating projects, to repay a portion of its outstanding revolving debt in the normal course in order to create debt availability to fund future corporate investments, which may potentially include future acquisitions, and for general corporate purposes.

# Item 4 DESCRIPTION OF THE BUSINESS

## 4.1 Overview

Shawcor is a global energy services company specializing in products and services for the pipeline and pipe services segment of the oil and gas industry and related products for petrochemical and industrial markets. The Company operates through a global network of fixed and mobile manufacturing and service facilities and is valued for its integrity, technology and proven capability to execute the most complex projects in our industry.

As of December 31, 2016, the Company operated through eight divisions, with manufacturing and service facilities located around the world. These divisions operate within the two principal market segments described below.

#### **Pipeline and Pipe Services**

The Pipeline and Pipe Services segment, which is the largest segment of the Company, comprises the Bredero Shaw, Canusa-CPS, Shaw Pipeline Services, Shawcor Inspection Services (formerly Desert NDT), Lake Superior Consulting, Flexpipe Systems and Guardian divisions. This segment carries on the following activities:

- Manufacture of anti-corrosion, insulation, weight coating and flow efficiency products and provision of related services for land and marine pipelines.
- Manufacture of heat shrinkable sleeves, adhesives, sealants and liquid coatings, and devices
  for their application, for onshore and offshore pipeline protection and sealing systems for the
  oil and gas, water and district heating and cooling markets.
- Provision of ultrasonic and radiographic pipeline girth weld inspection services for land and marine pipelines, pipeline engineering services and energy infrastructure integrity management services.
- Manufacture of spoolable composite line pipe systems.
- Provision of drill string inspection, refurbishment and tubular management services.

# **Petrochemical and Industrial**

The Petrochemical and Industrial Segment, which consists of the Connection Systems division, produces the following products:

- Heat shrinkable tubing, cold applied products, application equipment and kits for the utility, communications, automotive and industrial markets.
- Specialty instrumentation and control wire and cable for the petrochemical processing, power generation, transportation and industrial markets.

The Connection Systems division was formed from the 2015 integration of the DSG-Canusa and ShawFlex divisions.

The Company's divisions are described further below.

# 4.2 <u>Divisions</u>

# **Pipeline and Pipe Services**

#### **Bredero Shaw**

Bredero Shaw, with over 25 plants, operates in most major energy producing markets and, in addition to these permanent facilities, employs its engineering expertise to install temporary, project-specific plants anywhere in the world. Bredero Shaw's customers include major private and government-owned oil and gas producers, pipe mills, pipeline owners and pipeline construction contractors.

Bredero Shaw's product offerings include specialized, proprietary internal and external corrosion protection systems, thermal insulation coating systems and concrete weight coating systems for onshore and offshore pipelines. Bredero Shaw also has custom coating and field joint coating solutions. These coatings can be applied from several permanent locations, in the field, in a spool base or on a pipe lay vessel. Through its many regional locations, Bredero Shaw can respond to customers' coating requirements regardless of which pipe supplier a customer might select. In addition, Bredero Shaw has logistics capabilities that assist customers in reducing freight costs by allowing them to efficiently source and move pipe around the world.

During 2015, the Company's Socotherm division, which provided products and services similar to those of Bredero Shaw, was integrated with Bredero Shaw.

#### **Canusa-CPS**

Canusa-CPS develops, manufactures and markets heat shrinkable sleeves, adhesives, sealants and liquid coatings and devices for their application. Canusa-CPS' products are utilized in pipeline joint protection systems and girth weld corrosion protection applications worldwide. The division's expertise is in girth weld corrosion protection and sealing systems for onshore and offshore pipeline applications, high temperature pipeline products, specialty district heating and cooling markets and custom coating and field joint applications.

Canusa-CPS possesses considerable in-house research and development expertise that is utilized to develop new products which are introduced to customers through a global marketing program backed by a commitment to field and technical support.

Canusa-CPS services its markets through distribution and product finishing centers located in Alberta, Ontario, Texas, England, the United Arab Emirates, China and Indonesia, in addition to manufacturing facilities in Ontario and Alberta and contract manufacturing facilities in

Poland and India. Canusa-CPS markets and sells its products through direct sales and a global network of agents and distributors.

# **Shaw Pipeline Services**

Shaw Pipeline Services provides ultrasonic, radiographic and real time radiographic pipeline girth weld inspection services to pipeline construction contractors, owners and operators worldwide for both onshore and offshore pipeline applications from locations in Texas, Oklahoma, England, Scotland and Australia.

Shaw Pipeline Services has developed inspection and process control systems that satisfy required inspection specifications, meet engineering critical assessment criteria for weld evaluation and defect sizing, and provide rapid feedback of defects to the welding contractor, resulting in reduced repair rates.

#### **Shawcor Inspection Services (formerly Desert NDT)**

Shawcor Inspection Services provides nondestructive testing ("NDT") and inspection services for oil and gas gathering and processing infrastructure. Shawcor Inspection Services operates from branch locations which cover all major shale production basins in the United States. Shawcor Inspection Services supports the new construction of gathering and transmission pipelines with radiographic girth weld inspection. Advanced NDT and inspection services and data management are also provided throughout the operational life of midstream assets to ensure on-going integrity.

The Shawcor Inspection Services team of technicians and inspectors primarily provide services directly to the midstream and exploration and production firms that own pipelines, tanks and processing facilities.

#### **Lake Superior Consulting**

Lake Superior Consulting, acquired in early 2016, provides pipeline engineering and integrity management services to major North American pipeline operators from facilities in Minnesota, Texas, Nebraska, Kansas and North Dakota.

#### Flexpipe Systems

Flexpipe Systems manufactures proprietary, flexible, corrosion resistant pipeline products, which are marketed primarily to oil and natural gas producers in Canada, the United States, Latin America, the Asia Pacific Region, the Middle East and North Africa. The division serves its customers through its manufacturing and distribution centre in Calgary, Alberta, and its sales offices and service depots in Alberta, Saskatchewan, Texas, Colorado, Utah, California, Pennsylvania and North Dakota. Flexible composite pipe offers customers a corrosion resistant, cost effective replacement for conventional steel pipe due to reduced installation, lifecycle and land costs.

#### Guardian

Guardian is an oilfield asset and tubular management and services company to the upstream oil and gas industry in Canada, the United States and Mexico. Guardian's core business revolves around drill pipe, drill collars, drill tools, sucker rods, casing and production tubing, coating services, fracturing and flow iron and lined tubular installation. Guardian's services include inplant and mobile inspection, repair, machining, manufacturing, recertification, pressure testing and web-based inventory management systems. Guardian also provides inspection, recertification and repair services in Canada for high pressure surface iron that is used in pressure pumping and flow back operations. Guardian has a diversified customer base which includes drilling contractors, exploration and production (E&P) operators, equipment manufacturers and distributors, and rental companies.

Through Shawcor CSI Services, Guardian offers services for internal and external tank coatings, tank rehabilitation coatings, plant shutdown and facility maintenance, pipeline integrity digs, girth weld coatings and pipeline coatings.

# **Petrochemical and Industrial**

#### **Connection Systems**

In 2015, the DSG-Canusa and ShawFlex divisions combined to form the Connection Systems division. The Connection Systems division is a global manufacturer of heat shrinkable products including thin, medium and heavy-walled tubing, sleeves and moulded products as well as heat shrink accessories and equipment. The division also manufactures cold shrinkable products for low to medium voltage applications. These products are sold through distributors and agents throughout North America, Europe and Asia.

The division also provides electrical and mechanical insulation solutions for the automotive, electrical/utility, electronic and communications markets. Each product meets or exceeds relevant military, commercial, automotive, communications, utility, mining, industrial or original equipment manufacturers' specifications.

The division supports its customers for these products through four manufacturing and distribution facilities located in Canada, the United States, Germany and China.

The Connection Systems division is also a manufacturer of control, instrumentation and low voltage power cables for use primarily in industrial applications and its manufacturing facility is located in Toronto, Ontario. The division is a market leader in Canada with specialty products sold through distributors and agents throughout North America. Its electrical products meet or exceed industry standards such as those issued by the Canadian Standards Association and Underwriters Laboratories, and include proprietary products for numerous highly engineered applications. These products are used primarily in the North American oil and gas, power generation, mining, communication and automation industries.

# 4.3 Segmented Information

Revenues of each of the Company's operating segments expressed as a percentage of the Company's consolidated revenue for the years ended December 31, 2016 and 2015 are set out below:

Operating Segment	% Revenue (1)	
	2016	2015
Pipeline and Pipe Services	85%	90%
Petrochemical and Industrial	<u>15%</u>	10%
	100%	100%

Reference is made to note 8 to the Company's consolidated financial statements for the years ended December 31, 2016 and 2015, which note is incorporated herein by reference, for detailed financial information for each operating segment. These financial statements are available on SEDAR at www.sedar.com.

## 4.4 Customers

Through its diversified businesses, the Company serves a broad spectrum of customers in the energy industry and other industrial markets. Refer to Item 4.2 for a description of the markets and customers served. Generally, the activities of the Company as a whole are not dependent on any single customer or group of related customers although, in 2016, approximately 16% of its revenue was generated from one customer.

# 4.5 <u>Components, Raw Materials and Supply Matters</u>

Shawcor purchases a broad range of materials and components throughout the world in connection with its manufacturing activities. Major items include polyolefin and other polymeric resins, iron ore, cement, adhesives, sealants, copper, fibreglass and other ferrous and non-ferrous wire. The ability of suppliers to meet performance and quality specifications and delivery schedules is critical to the maintenance of customer satisfaction and the success of our business but the Company is not dependent on any single source of supply. The current state of the global oil and gas market has caused a significant lowering of the prices for most major commodities, although some commodities such as polyolefins have increased in price due to constraints in supply. While the materials required for the Company's manufacturing operations have generally been readily available, cyclical swings in supply and demand can produce short-term shortages and/or price spikes, and the Company's ability to pass on such price increases may be restricted in the short term.

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<sup>(1)</sup> Net of inter-segment transfers.

# 4.6 <u>Intangible Properties</u>

The Company utilizes patented and proprietary technology throughout its operations; however, the Company's activities are not dependent to a significant extent on any single or group of related patents, licences, franchises or concessions. The Company's activities are also not dependent on any single trademark, although some trademarks are identified with a number of the Company's products and services and are important in the sale and marketing of such products and services. It is the Company's policy to register or otherwise take the necessary steps to protect such intellectual property in all jurisdictions where it has significant operations, or where its major competitors have operations. The Company applied for 36 new patents in multiple jurisdictions in 2016 and currently holds 195 issued patents and 128 registered trademarks in respect of a number of its products and services in various jurisdictions where it carries on business. The Company's patents expire after a prescribed period has elapsed from the date of application or grant, generally 20 years in Canada and the United States, although the periods vary in other jurisdictions. Registered trademarks are generally renewed by the Company for as long as they remain in use.

# 4.7 **Seasonality and Cyclicality**

While the activities of some of the Company's individual businesses have seasonal fluctuations, total Company revenue is not significantly impacted by seasonal factors. Revenue from year to year is subject to substantial variation, however, as the Company's operations in the Pipeline and Pipe Services segment, representing 85% of the Company's consolidated revenue in 2016, are largely project-based, and the nature and timing of projects can result in variability in the Company's financial results. The primary driver of demand for the Company's products and services is the level of energy industry investment in infrastructure for hydrocarbon exploration, development and transportation around the globe. This investment, in turn, is driven by global levels of economic activity, current and forecasted oil and gas commodity prices, the impact of supply, demand and depletion within the hydrocarbon marketplace and the financial position of the major energy companies. All of these factors tend to be cyclical.

# 4.8 Competitive Conditions in Principal Markets

The Company actively competes with other suppliers of similar products and services in each of its markets. It is not anticipated that there will be any significant changes in the level of competition in any of the Company's markets in the near term. Each of the Company's divisions holds a leading market position with all divisions enjoying a significant share of the markets served.

# 4.9 Properties

The Company's businesses operate through the following manufacturing and service facilities:

Location	Major Products or Services	Owned or Leased
Camrose, Alberta (2 sites)	Pipe Coating	Owned
Edmonton, Alberta (2 sites)	Pipe Coating	Owned
Regina, Saskatchewan	Pipe Coating	Owned
Fontana, California	Pipe Coating	Leased
Channelview, Texas	Pipe Coating	Owned
Pearland, Texas	Pipe Coating	Leased
Vineyard, Utah	Pipe Coating	Leased
Escobar, Argentina	Pipe Coating	Owned
Valentin Alsina, Argentina	Pipe Coating	Owned
Baku, Azerbaijan Republic	Pipe Coating	Leased
Vitoria, Brazil	Pipe Coating	Leased
Kabil, Indonesia	Pipe Coating	Leased
Adria, Italy	Pipe Coating	Owned
Pozzallo, Italy	Pipe Coating	Owned
Kuantan, Malaysia	Pipe Coating	Leased
Coatzacoalcos, Mexico	Pipe Coating	Leased

Monterrey, Mexico	Pipe Coating	Leased
Veracruz, Mexico	Pipe Coating	Leased
Orkanger, Norway	Pipe Coating	Owned
Ellon, Scotland	Pipe Coating	Leased
Leith, Scotland	Pipe Coating	Leased
La Brea, Trinidad	Pipe Coating	Leased
Ras Al Khaimah, UAE	Pipe Coating	Leased
Bergeijk, Netherlands	Pipeline Logistics	Leased
Toronto, Ontario	Connection Systems	Owned
Cincinnati, Ohio	Connection Systems	Leased
Suzhou, China (2 sites)	Connection Systems	Leased
Rheinbach, Germany	Connection Systems	Owned
Burks Falls, Ontario	Corrosion Protection Products	Leased
Huntsville, Ontario	Corrosion Protection Products	Owned
Toronto, Ontario	Corrosion Protection Products	Owned
Abu Dhabi, UAE	Corrosion Protection Products	Leased
Edmonton, Alberta	Integrity Management	Leased
Searcy, Arkansas	Integrity Management	Leased

Brighton, Colorado	Integrity Management	Leased
Overland Park, Kansas	Integrity Management	Leased
Eunice, Louisiana	Integrity Management	Leased
Duluth, Minnesota	Integrity Management	Leased
Minneapolis, Minnesota	Integrity Management	Leased
Carlsbad, New Mexico	Integrity Management	Leased
Farmington, New Mexico	Integrity Management	Leased
Omaha, Nebraska	Integrity Management	Leased
Williston, North Dakota	Integrity Management	Leased
Massillon, Ohio	Integrity Management	Leased
Youngstown, Ohio	Integrity Management	Leased
Elk City, Oklahoma	Integrity Management	Leased
Henryetta, Oklahoma	Integrity Management	Leased
Tulsa, Okhlahoma	Integrity Management	Leased
Pittsburgh, Pennsylvania	Integrity Management	Leased
Abilene, Texas	Integrity Management	Leased
Fort Worth, Texas	Integrity Management	Leased
Houston, Texas	Integrity Management	Leased

Odessa, Texas (2 sites)	Integrity Management	Leased
Perryton, Texas	Integrity Management	Leased
Pharr, Texas	Integrity Management	Leased
Poteet, Texas	Integrity Management	Leased
Rockwall, Texas	Integrity Management	Leased
Perth, Australia	Integrity Management	Leased
Norfolk, England	Integrity Management	Leased
Alness, Scotland (2 sites)	Integrity Management	Owned / Leased
Calgary, Alberta (4 sites)	Composite Pipe Systems	Leased
Clairmont, Alberta	Composite Pipe Systems	Leased
Edmonton, Alberta	Composite Pipe Systems	Leased
Estevan, Saskatchewan	Composite Pipe Systems	Leased
Bakersfield, California	Composite Pipe Systems	Leased
Grand Junction, Colorado	Composite Pipe Systems	Leased
Dickinson, North Dakota	Composite Pipe Systems	Owned
Big Wells, Texas	Composite Pipe Systems	Leased
Ennis, Texas	Composite Pipe Systems	Leased
Midland, Texas (2 sites)	Composite Pipe Systems	Owned / Leased

Myton, Utah	Composite Pipe Systems	Leased
Brisbane, Australia	Composite Pipe Systems	Leased
Brooks, Alberta	Tubular Inspection Services	Leased
Dimsdale, Alberta	Tubular Inspection Services	Owned
Edmonton, Alberta	Tubular Inspection Services	Owned
Clairmont, Alberta	Tubular Inspection Services	Leased
Grande Prairie, Alberta	Tubular Inspection Services	Owned/Leased
Lloydminster, Alberta	Tubular Inspection Services	Leased
Nisku, Alberta (4 sites)	Tubular Inspection Services	Leased
Provost, Alberta	Tubular Inspection Services	Leased
Red Deer, Alberta (3 sites)	Tubular Inspection Services	Owned
Charlie Lake, British Columbia	Tubular Inspection Services	Owned
Estevan, Saskatchewan (2 sites)	Tubular Inspection Services	Owned / Leased
Cuidad del Carmen, Mexico	Tubular Inspection Services	Leased
Veracruz, Mexico	Tubular Inspection Services	Leased
Villahermosa, Mexico	Tubular Inspection Services	Leased

Except for the pipe coating facility in Adria, Italy, none of the Company owned plants are subject to mortgages. The Company considers that these properties are in good condition, well maintained and generally suitable and adequate to carry on the Company's activities.

# 4.10 Research and Development

The Company conducts its own research activities and product development programs and provides product and process-oriented engineering services for its business units. The Company's divisions and the corporate R&D group possess considerable in-house technical expertise that is utilized to develop new products which are introduced to customers through technology-based marketing programs backed by a commitment to field and technical support. The Company also collaborates/partners with third parties, such as universities and technical institutions and through equity based investments in technology based companies such as Vintri and Zedi, to support and enhance our core product offering and long term growth strategy. Approximately \$13.2 million was spent on research and development during 2016, compared to \$13.7 million in 2015, and the Company applied for 36 new patents in multiple jurisdictions in 2016. In addition, the Company routinely incurs costs in its production facilities to develop and prototype new products, which are not included in research and development expenses. In 2016, the Company developed a new high temperature coating for on-shore applications and expanded the real time data transmission of field data to the IntelliCOAT system. The Company will continue ongoing research and development programs directed towards new or enhanced products, services and processes.

#### 4.11 <u>Environmental Matters</u>

The Company designs and operates its plants and processes in compliance with federal, provincial, state, local and applicable foreign requirements regulating the discharge of substances into the environment or relating to the protection of the environment and the Company monitors compliance with these environmental requirements through an on-going audit program.

The Company's total environmental remediation costs paid in 2016 were \$291,350 (\$2,657,778 in 2015) and, as at December 31, 2016, the accruals on the Company's financial statements related to environmental matters and included as decommissioning liabilities were \$29.5 million (\$34.4 million in 2015). The Company believes the accruals to be sufficient to satisfy its estimate of all liabilities related to known environmental matters.

The Company cannot predict the changes that may be made to environmental requirements in the future although it anticipates that such requirements generally will become more stringent. In this regard, the Company's capital and operating costs for environmental controls may increase in the future. In 2016, the impact of increasing environmental requirements did not have a material effect on the Company's capital and operating costs and, in the future, is not expected to have a material effect on the earnings or competitive position of the Company.

## 4.12 **Employees**

In total, the Company employed an average of 5,706 permanent and contract personnel during 2016. The Company's divisions had domestic and foreign labour union contracts which covered an estimated 1,271 employees during 2016. These contracts have various expiry dates ranging from 2017 to 2019. The Company believes that relations with its employees have been satisfactory and does not anticipate any unusual difficulties in renegotiating these contracts on reasonable terms.

# 4.13 Foreign Operations

The Company conducts its international operations through various operating subsidiaries in the locations described in Item 4.9 "Properties". Additional subsidiaries and joint ventures may be established from time to time when a corporate presence is needed to conduct business in other jurisdictions. International operations are necessarily subject to various risks, some of which are different from those found in Canada. For further information, refer to Item 4.16 "Risk Factors". The Company's production costs are affected by conditions prevailing in the countries in which its production facilities are located. The Company is exposed to currency exchange risks in the transfer of goods and services between countries. The Company's production costs, profit margins and competitive position may be affected by the strength of the currencies in the countries where it manufactures goods relative to the strength of the currencies in the countries where its goods are sold. The Company maintains a hedging program utilizing foreign currency forward contracts.

Revenues from each of the geographic regions in which the Company operates, expressed as a percentage of the Company's consolidated revenue, for the years ended December 31, 2016 and 2015 are set out below:

Geographic Segment	% Revenue		
	2016	2015	
North America	50%	46%	
Latin America	5%	8 %	
Europe, Middle East, Africa, Russia	35%	36%	
Asia Pacific	<u>10%</u>	<u>10%</u>	
	100%	100%	

Reference is made to note 8 to the Company's consolidated financial statements for the years ended December 31, 2016 and 2015, which note is incorporated herein by reference, for detailed financial information for each geographic segment. These financial statements are available at www.sedar.com.

Currency fluctuations also affect the Company's consolidated financial results due to the translation of the foreign operations' financial results into Canadian dollars. Refer to the Company's Management's Discussion and Analysis for the year ended December 31, 2016, which is available at www.sedar.com, for a description of the impact of the translation of foreign operations' financial results into Canadian dollars during 2016.

The assets and liabilities of self-sustaining foreign operations are translated into Canadian dollars at year-end exchange rates. Income and expense items are translated at the average exchange rates prevailing at the dates of the transactions. Foreign exchange gains or losses resulting from these translations are credited or charged to the cumulative translation account on the consolidated balance sheet.

#### 4.14 Trends

Since global oil and gas prices first declined in the second half of 2014, the Company has experienced weak market conditions that have impacted demand for the Company's products and services. Lower expenditures by customers on the drilling and completion of wells has affected the Pipeline and Pipe Services Segment - North America region and the curtailment in capital spending on new oil and gas development projects has impacted the international regions of the Pipeline and Pipe Services Segment. These trends were evident in the Company's weak financial performance particularly in the second and third quarters of this year.

However, commencing in the fourth quarter of 2016, the Company's financial performance evidenced improving market demand which, combined with the growth in the Company's order backlog, offers the potential that Shawcor will now sustain a trend of improving results. Critical to this outlook are two factors. The first is the level of North American upstream activity, and specifically the number of new oil and gas wells drilled and completed. Since reaching a low level of less than 500 active drilling rigs in the second quarter of 2016, North American rig counts have more than doubled to over 1,000 rigs in early February 2017. As rig counts improve, the demand for the Company's gathering line pipeline products and services grows.

A second factor driving Shawcor's outlook is the level of capital spending on pipeline infrastructure projects by the Company's customers. Since late 2014, the decline in oil and gas prices has resulted in the delay or curtailment of large oil and gas greenfield development projects. This impact has been most evident for Shawcor in our international regions. In 2016, capital spending reductions also translated into substantially lower levels of small project activity both in North America and internationally. In the case of both large greenfield developments and smaller production sustaining capital projects, customers continue to limit commitments for new projects to ensure that capital spending is in line with reduced operating cash flow. Where the Company is seeing evidence of projects proceeding is in natural gas infrastructure, which is supported by strong economics and supportive political mandates to reduce hydrocarbon emissions in electricity generation. One such example is the USD\$2.1 billion Sur de Texas -Tuxpan undersea natural gas pipeline in Mexico, which is expected to generate approximately \$350 million in pipe coating revenue for Shawcor during 2017. This project, combined with a modest but steady improvement in North American well completion activity, is expected to enable the Company to deliver strong growth in financial performance in 2017. Further detail on the outlook for the Pipeline and Pipe Services segment by region and in the Petrochemical and Industrial segment is set out below.

## Pipeline and Pipe Services Segment - North America

Market demand in Shawcor's North American Pipeline segment businesses is closely tied to well completion activity in North America which drives the demand for small diameter pipe coating and joint protection, composite pipe for gathering line applications, OCTG pipe inspection and refurbishment and gathering line girth weld inspection. Demand for these products and services is expected to fluctuate with changes in global oil and gas prices and the resulting volume of wells drilled and completed. As noted above, drilling rig counts in North America bottomed in the second quarter of 2016 and have improved through early 2017. This should enable some modest improvement in revenue for these businesses in 2017. To gain the opportunity associated

with increased well completions, the Company will need to be successful in scaling operations to meet activity as well as managing significant potential volatility.

In addition to changes in market demand, the Company's North American Pipeline segment businesses expect to generate increased revenue in 2017 from new growth initiatives. Areas of focus include increased shipments of composite pipe to international markets, the expansion of the composite pipe product line to include the new six inch and eight inch FlexFlow composite pipe product, and the continued expansion of new non-destructive testing services to midstream and oilfield infrastructure integrity applications.

The final driver of revenue in the Company's North American Pipeline segment relates to the build of new pipeline infrastructure. Offshore projects in the Gulf of Mexico are likely to be limited to smaller projects that provide tie-back infrastructure until such time as a sustained improvement in oil prices supports new greenfield developments. For large diameter onshore transmission lines, the Company is actively engaged with customers on upfront engineering and bidding for a number of large pipe coating projects. However, these projects must overcome a number of regulatory and possible legal challenges before they can proceed and thus are likely to benefit 2018 at the earliest.

# Pipeline and Pipe Services Segment - Latin America

Of the Company's geographic regions, the Latin America Pipeline segment region will provide the most certainty for financial performance improvement in 2017. The Company has now commenced concrete weight coating operations in Altamira, Mexico on the \$350 million Sur de Texas – Tuxpan project. Pipe deliveries to the site are proceeding on schedule and the first of two mobile plants is now operational. The second plant will enter production in May and full production of the project should be achieved by the end of the second quarter. With the vast majority of the project revenue expected to be realized in 2017, the Sur de Texas – Tuxpan project should provide a strong source for improved Shawcor financial performance in 2017.

# Pipeline and Pipe Services Segment – Europe, Middle East, Africa and Russia ("EMAR")

Revenue in the EMAR Pipeline segment region is expected to move significantly lower in 2017 as a result of the completion of pipe coating for the Shah Deniz project and the two South Stream projects in 2016 and the fact that pipeline operators continue to defer capital spending projects, both large greenfield offshore oil developments and smaller production sustaining projects. However, with the South Stream pipelines now proceeding based on a revised route to Turkey, and the Nord Stream 2 pipelines scheduled for construction, the Company is pursuing significant revenue opportunities for girth weld inspection, pipeline joint protection and pipe end preservation on these pipelines which would support growth in revenue in 2018. Also potentially impacting 2018 are a number of projects in the region that the Company is either bidding or on which it has provided budgetary estimates.

# Pipeline and Pipe Services Segment - Asia Pacific

Following a steep decline in revenue in 2016, the Company is now expecting revenue to recover in the Asia Pacific region based on continued production in the first quarter of 2017 of the flow assurance work for the Shah Deniz project and the anti-corrosion coating for pipe destined for

Mexico for the Sur de Texas – Tuxpan project. In the second quarter and continuing throughout 2017, healthy growth over 2016 levels is expected to continue based on booked projects included in the order backlog and bidding opportunities that are approaching award.

#### Petrochemical and Industrial Segment

Shawcor's Petrochemical and Industrial segment businesses continue to deliver steady growth in revenue and earnings based on consistent demand growth in the North American and European automotive, industrial and nuclear refurbishment markets served by the segment. This trend is expected to continue in 2017 as new capacity for control cable and sealing and insulation products enters production and relieves capacity constraints that are currently limiting revenue growth.

#### **Order Backlog**

The Company's order backlog consists of firm customer orders only and represents the revenue the Company expects to realize on booked orders over the succeeding twelve months. The Company reports the twelve month billable backlog because it provides a leading indicator of significant changes in consolidated revenue. The order backlog at December 31, 2016 of \$650 million improved by 7% from \$606 million at September 30, 2016 and was over 44% improved from the backlog at the start of the year. The increase in the backlog is due primarily to the inclusion of the booked order for the Sur de Texas – Tuxpan project in Mexico. This project has an estimated value in excess of \$350 million of which over 90% is now included in the backlog at December 30, 2016, with the remainder scheduled for production in early 2018.

In addition to the backlog, the Company closely monitors its bidding activity and the value of outstanding firm bids is currently in excess of \$700 million. In addition, the Company has provided budgetary estimates and is currently working with customers on projects with aggregate values of in excess of \$1.7 billion. These projects provide a solid basis for potential backlog growth in 2017 and beyond.

## 4.15 Social and Environmental Policies

The following is the Company's Health, Safety and Environmental ("HSE") policy:

"Shawcor's vision is an Incident and Injury Free workplace, with no harm to people, while protecting the environment.

The Company is committed to providing a safe and healthy workplace and conducting its business activities in a manner that protects the environment. To achieve these goals, all Company locations shall adhere to the following principles:

- Identification and evaluation of all HSE hazards or aspects and the management of their risks or impacts to acceptable levels.
- Compliance with all applicable HSE legislation.
- *Prevention of incidents, injuries, and pollution.*
- Intolerance of the conditions and behaviours that contribute to incidents and injuries.

- *Reduction of waste and conservation of resources.*
- *Recording and communicating HSE performance throughout the organization.*
- *Continual improvement of HSE performance.*

The President and senior management shall visibly uphold these principles throughout the Company and integrate them into the Company's HSE Policy and Management System. The Board of Directors of Shawcor shall regularly review HSE performance.

Management and supervisory personnel at each division and location shall be responsible for implementing and maintaining the Company's HSE Policy and Management System. Contractors and Subcontractors shall work in accordance with the Company's HSE Policy and comply with applicable HSE legislation. Regular HSE audits shall be done to determine conformance to the HSE Management System.

Every employee whose work may create a significant HSE impact, shall be trained and held accountable for complying with the Company's HSE Policy and related procedures, practices, instructions and rules. Working safely and in an environmentally appropriate manner are conditions of employment. Each employee has a duty to report workplace conditions or practices that pose a safety hazard or threaten the environment and to take reasonable actions to alleviate such risks.

Everyone is responsible for recognizing that by risking incident or injury, they are putting in jeopardy what they value and those they care for."

The Company's failure to comply with its HSE policy could result in a material, negative impact on the Company's business and operations.

The Company has developed and implemented a robust system which is used by its divisions to implement this HSE policy. This system includes procedures and practices which are used throughout the Company as well as corresponding monitoring and auditing processes. In addition, the Board of Directors of the Company monitors the Company's HSE performance at each of its regularly scheduled meetings.

The Company has developed a Code of Conduct (the "Code") which states the underlying values and behaviours that must govern the behaviour of all directors, officers and employees. Beyond establishing standards of behaviours, the Code puts in place a program for reporting violations of Company policies. All salaried employees are required to sign a statement of compliance each year agreeing to follow the Code and indicating whether or not they are aware of any violations of the Code.

Specific items addressed in the Code include provisions dealing with foreign corrupt practices, improper payments, economic sanctions and export controls, anti-trust/competition law compliance, securities trading, health, safety and environmental policies, protection of the work environment from harassment and discrimination, employment equity and conflicts of interest. A copy of the Company's Code of Conduct may be found at <a href="https://www.Shawcor.com">www.Shawcor.com</a>.

#### 4.16 Risk Factors

A decline in global drilling activity as a consequence of lower global oil and gas prices would have a material adverse effect on the Company's projections, business, results of operations and financial condition.

The Company's business is materially dependent on the level of global drilling activity, which, in turn depends on global oil and gas demand, prices and production depletion rates. Lower drilling activity decreases demand for the Company's products and services, including small diameter pipe coating, composite pipe, gathering line weld inspection and tubular inspection and inventory management services. These business activities represented approximately 20% of 2016 revenues.

An economic downturn or a continued global decline in energy prices could materially affect demand for the Company's products and services and, consequently, its projections, business, results of operations and financial condition.

Demand for oil and natural gas is influenced by numerous factors, including the North American and worldwide economies as well as activities of the Organization of Petroleum Exporting Countries ("OPEC"). Economic declines impact demand for oil and natural gas and result in a softening of oil and gas prices and projected oil and gas drilling activity. If economic conditions or international markets decline to an extent or for a duration which is unexpected, the Company's projections, business, results of operations and financial condition could be materially adversely affected. In addition, if actions by OPEC and other oil producers to increase production of oil adversely affect world oil prices or result in the maintenance of existing prices, additional declines in rig counts could result, and the Company's projections, business, results of operations and financial condition could be materially adversely affected. Similarly, demand for the products of the Petrochemical and Industrial segment's businesses is largely dependent on the level of general economic activity in North America and Europe. Decreases in economic activity in these regions could result in significant decreases in activity levels in these businesses.

A cyclical decline in the level of global pipeline construction could have a material adverse effect on the Company's projections, business, results of operations and financial condition.

The Company's business is materially dependent on the level of global pipeline construction activity which in turn relates to the growth in demand for oil and natural gas and the availability of new supplies to meet this increased demand. Reductions in capital spending by producers could dampen demand for the Company's products and services supplied in pipeline markets.

Revenue generated by the Company's Pipeline and Pipe Services segment accounted for 85% of consolidated sales in 2016. With this proportion expected to continue, the Company's revenue is materially dependent on the global Pipeline and Pipe Services industry. Any further significant declines in pipeline market activity could have a material adverse effect on the Company's projections, business, results of operations and financial condition.

The Company's operations may experience interruptions due to political, economic or other risks, which could adversely affect the Company's projections, business, results of operations and financial condition.

During 2016, the Company derived over 19% of its total revenue from its facilities outside Canada, the US and Western Europe. In addition, part of the Company's sales from its locations in Canada and the US were for use in other countries. The Company's operations in certain international locations are subject to various political and economic conditions existing in those countries that could disrupt operations. These risks include:

- currency fluctuations and devaluations;
- currency restrictions and limitations on repatriation of profits;
- political instability and civil unrest;
- hostile or terrorist activities; and
- restrictions on foreign operations.

In addition, the Company is specifically exposed to risks relating to economic or political developments in Argentina, Azerbaijan, Mexico and other developing countries.

The Company's foreign operations may suffer disruptions and may incur losses that would not be covered by insurance. In particular, civil unrest in politically unstable countries may increase the possibility that the Company's operations could be interrupted or adversely affected. The impact of such disruptions could include the Company's inability to ship products in a timely and cost effective manner, its inability to place contractors and employees in various countries or regions, or result in the need for evacuations or similar disruptions.

Any material currency fluctuations, devaluations or political unrest that may disrupt oil and gas exploration and production or the movement of funds and assets could materially adversely affect the Company's projections, business, results of operations and financial condition.

The Company's North American operations could be affected by regulatory approval processes that could delay or prevent the construction of new pipeline infrastructure.

The Company could be subject to substantial liability claims, which could adversely affect its projections, business, results of operations and financial condition.

Some of the Company's products are used in hazardous applications where an accident or a failure of a product could cause personal injury, loss of life, damage to property, equipment or the environment, as well as the suspension of the end-user's operations. If the Company's products were to be involved in any of these difficulties, the Company could face litigation and may be held liable for those losses. The Company's insurance coverage may not be adequate in risk coverage or policy limits to cover all losses or liabilities that it may incur. Moreover, the Company may not be able in the future to maintain insurance at levels of risk coverage or policy limits that management deems adequate. Any claims made under the Company's policies likely

will cause its premiums to increase. Any future damages deemed to be caused by the Company's products or services that are not covered by insurance, or that are in excess of policy limits or subject to substantial deductibles, could have a material adverse effect on the Company's projections, business, results of operations and financial condition.

# The Company is subject to litigation and could be subject to future litigation and significant potential financial liability.

From time to time, the Company is a party to litigation and legal proceedings that it considers to be a part of the ordinary course of business. Although none of the litigation or legal proceedings in which the Company is currently involved could reasonably be expected to have a material adverse effect on the Company's projections, business, results of operations or financial condition, the Company may, however, become involved in material legal proceedings in the future. Such proceedings may include, for example, product liability claims and claims relating to the existence or use of hazardous materials on the Company's property or in its operations, as well as intellectual property disputes and other material legal proceedings with competitors, customers, employees and governmental entities. These proceedings could arise from the Company's current or former actions and operations or the actions or operations of businesses and entities acquired by the Company prior to acquisition. The Company maintains insurance it believes to be commercially reasonable and customary; however, such coverage may be inadequate for or inapplicable to particular claims.

# The Company is subject to health, safety and environmental laws and regulations that expose it to potential financial liability.

The Company's operations are regulated under a number of federal, provincial, state, local and foreign environmental laws and regulations, which govern, among other things, the discharge of hazardous materials into the air and water as well as the handling, storage and disposal of hazardous materials. Compliance with these environmental laws is a major consideration in the manufacturing of the Company's products, as the Company uses, generates, stores and disposes of hazardous substances and wastes in its operations. The Company may be subject to material financial liability for any investigation and clean-up of such hazardous materials. In addition, many of the Company's current and former properties are or have been used for industrial purposes. Accordingly, the Company also may be subject to financial liabilities relating to the investigation and remediation of hazardous materials resulting from the actions of previous owners or operators of industrial facilities on those sites. Liability in certain instances may be imposed on the Company regardless of the legality of the original actions relating to the hazardous or toxic substances or whether or not the Company knew of, or was responsible for, the presence of those substances. The Company is also subject to various Canadian and US federal, provincial, state and local laws and regulations as well as foreign laws and regulations relating to safety and health conditions in its manufacturing facilities. Those laws and regulations may also subject the Company to material financial penalties or liabilities for any noncompliance, as well as potential business disruption if any of its facilities or a portion of any facility is required to be temporarily closed as a result of any violation of those laws and regulations. Any such financial liability or business disruption could have a material adverse effect on the Company's projections, business, results of operations and financial condition.

The Company's projections, business, results of operations and financial condition could be adversely affected by actions under Canadian, US, European or other trade or tax laws.

The Company is a Canadian-based company with significant operations in the United States. The Company also owns and operates international manufacturing operations that support its Canadian, US and European operations. If actions under Canadian, US, European or other trade or tax laws were instituted that limited the Company's access to the materials or products necessary for such manufacturing operations, the Company's ability to meet its customers' specifications and delivery requirements would be reduced. Any such reduction in the Company's ability to meet its customers' specifications and delivery requirements could have a material adverse effect on the Company's projections, business, results of operations and financial condition.

The Company has various facilities that export products to the United States and other countries. Any changes to trade or tax laws that negatively impact the competitiveness of the Company's exports or products could have a material adverse effect on the Company's projections, business, results of operations and financial condition.

The Company's material financing agreements contain financial and other covenants that, if breached by the Company, may require the Company to redeem, repay, repurchase or refinance its existing debt obligations prior to their scheduled maturity. The Company's ability to refinance such obligations may be restricted due to prevailing conditions in the capital markets, available liquidity and other factors.

The Company is party to a number of financing agreements which contain financial or other covenants. If the Company was to breach the financial or other covenants contained in its financing agreements, the Company may be required to redeem, repay, repurchase or refinance its existing debt obligations prior to their scheduled maturity and the Company's ability to do so may be restricted or limited by the prevailing conditions in the capital markets, available liquidity and other factors. If the Company is unable to refinance any of the Company's debt obligations in such circumstances, its ability to make capital expenditures and its financial condition and cash flows could be adversely impacted. If future debt financing is not available to the Company when required or is not available on acceptable terms, the Company may be unable to grow its business, take advantage of business opportunities, respond to competitive pressure or refinance maturing debt, any of which could have a material adverse effect on the Company's operating results and financial condition.

Increases in the prices and/or shortages in the supply of raw materials used in the Company's manufacturing processes could adversely affect the competitiveness of the Company, its ability to serve its customers' needs and its financial performance.

The Company purchases a broad range of materials and components throughout the world in connection with its manufacturing activities. Major items include polyolefin and other polymeric resins, iron ore, cement, adhesives, sealants and copper and other nonferrous wire. The ability of suppliers to meet performance and quality specifications and delivery schedules is important to the maintenance of customer satisfaction. While the materials required for its manufacturing

operations have generally been readily available, cyclical swings in supply and demand can produce short-term shortages and/or price spikes. The Company's ability to pass on any such price increases may be restricted in the short term.

## Demand for the Company's products and services could be adversely affected by changes to Canadian, US or other countries' laws or regulations pertaining to the emission of Carbon Dioxide and other Greenhouse Gases ("GHGs") into the atmosphere.

Although the Company is not a large producer of GHGs, the products and services of the Company's production are mainly related to the transmission of hydrocarbons including crude oil and natural gas, whose ultimate consumption are major sources of GHG emissions. Changes in the regulations concerning the release of GHGs into the atmosphere, including the introduction of so-called carbon taxes or limitations over the emissions of GHGs, may adversely impact the demand for hydrocarbons and ultimately, the demand for the Company's products and services.

## The Company operates in a number of markets where there are changing competitive dynamics that could adversely affect its market shares and operating margins.

Certain market segments that are material to the Company's financial performance have mature technology characteristics and face commoditization threats. While the Company continually seeks to advance its technology and thus differentiate its products and services, there can be no assurance that it will not be subject to downward price pressures from competitors seeking to gain market share by providing lower priced offerings. The Company derives a material proportion of its revenue from offshore pipeline projects. Increasingly, the ability to maintain a direct relationship with the owner of the pipeline is impacted by the role of intermediaries such as engineering procurement and construction contractors who are contracted by the pipeline owner to procure the Company's products and services as part of a larger integration scope of work. Loss of direct interface with pipeline owners could impair the Company's ability to commercialize new products and differentiate its product offerings versus competitors.

### Potential acquisitions or investments in other companies may have a negative impact on the Company's business.

The Company may seek to expand its business through acquisitions as it intends to consider and evaluate opportunities for growth through acquisitions when suitable acquisition targets present themselves; however, there can be no assurance that the Company will find attractive acquisition candidates in the future, or that the Company will be able to acquire such candidates on economically acceptable terms, if at all. Acquisitions may require substantial capital and negotiations of potential acquisitions and the integration of acquired operations could disrupt the Company's business by diverting management, and employees' attention away from day-to-day operations. The difficulties of integration may be increased by the necessity of coordinating geographically diverse organizations, integrating personnel with disparate backgrounds and combining different corporate cultures.

At times, acquisition candidates may have liabilities or adverse operating issues that the Company fails to discover through due diligence prior to the acquisition. The Company may lack sufficient knowledge of the acquisition candidate's technology and market position to enable an effective evaluation of the acquisition economics or integration challenges. If the Company consummates any future acquisitions, the Company's business, capitalization, financial condition and results of operations may change significantly.

Acquisitions or investments may require the Company to expend significant amounts of cash, resulting in the Company's inability to use these funds for other business purposes. The potential impairment or complete write-off of goodwill and other intangible assets related to any such acquisition may reduce the Company's overall earnings and could negatively affect the Company's balance sheet. The occurrence of any of the foregoing could have a material adverse effect on the Company's projections, business, and results of operations and/or financial condition.

## Exchange rate fluctuations are beyond the Company's control and could adversely affect its projections, business, and results of operations and/or financial condition.

The majority of the Company's business is transacted outside of Canada through subsidiaries operating in several countries. The net investments in these subsidiaries as well as their revenue, operating expenses and non-operating expenses are based in foreign currencies. As a result, the Company's consolidated revenue, expenses and financial position may be impacted by fluctuations in foreign exchange rates as these foreign currency items are translated into Canadian dollars.

The objective of the Company's foreign exchange risk management activities is to minimize transaction exposures associated with the Company's foreign currency-denominated cash streams and the resulting variability of the Company's earnings. The Company utilizes foreign exchange forward contracts to manage this foreign exchange risk. With the exception of the Company's U.S. dollar based operations, the Company does not hedge translation exposures.

### The loss or failure to attract or retain key personnel could adversely affect its projections, business, and results of operations and/or financial condition.

The Company's success depends in large part on its ability to attract and retain key management, engineering, scientific, marketing, and operating personnel. Recruiting personnel for the global energy services and oil and gas sector is highly competitive. The Company may not be able to continue to attract and retain qualified executive, managerial and technical personnel needed for its business. The failure to attract or retain qualified personnel could have a material adverse effect on the Company's projections, business, results of operations and financial condition.

#### Item 5 <u>DIVIDENDS</u>

The declaration and payment of dividends are at the discretion of the Board of Directors. The Board of Directors intends to maintain a stable dividend payment policy determined by reference to average net earnings over a period of years and the Company's overall financial standing.

The following table summarizes dividends per share during the previous three years:

	2016	2015	2014
Common Shares	\$0.60	\$0.60	\$0.575

Shawcor and certain of its subsidiaries are parties to an amended and restated credit agreement dated March 20, 2013, as subsequently amended, in respect of a US\$317 million revolving credit facility. Shawcor is also a party to an amended US\$350 million note purchase agreement dated March 20, 2013, as subsequently amended, in respect of its Senior Notes. The Company's Credit Facility and outstanding Senior Notes require that, prior to (and after giving effect to) the payment of dividends, Shawcor must comply with certain financial covenants. The Company is and has been in compliance with such financial covenants at all relevant times.

#### Item 6 DESCRIPTION OF CAPITAL STRUCTURE

The authorized capital of the Company consists of an unlimited number of common shares. Each common share entitles the holder thereof to one vote per share at meetings of Shareholders, to receive dividends if, as and when declared by the Board of Directors and to receive pro rata the remaining property and assets of the Company upon its dissolution or winding up.

As at December 31, 2016, the Company had outstanding approximately US\$197 million in issued Senior Notes. These Notes had a weighted average interest rate of 3.65% and a weighted average term of 10.4 years as of March 20, 2013, the date of their issuance.

#### Item 7 MARKET FOR SECURITIES

The following are the monthly closing price ranges and volumes traded on the Toronto Stock Exchange for the Company's common shares for 2016:

Month	Close(\$)	High(\$)	Low(\$)	Volume(#)
January	30.25	30.25	26.33	4,705,647
February	27.52	29.63	26.78	2,424,001
March	28.23	29.77	26.51	4,069,601
April	33.90	33.90	26.66	3,363,975
May	31.47	32.30	29.07	3,271,929
June	32.03	32.99	30.68	2,403,944
July	29.78	33.01	28.47	2,805,638
August	32.04	32.10	29.16	1,963,573

September	32.37	32.37	30.64	2,032,239
October	33.55	34.88	32.26	1,738,735
November	33.03	33.34	30.99	1,782,885
December	35.84	36.00	32.97	3,295,462

#### Item 8 DIRECTORS AND OFFICERS

#### 8.1 Name, Address, Occupation and Security Holdings as a Group

#### 8.1.1 <u>Directors</u>

The following table sets out for each Director, as of the date hereof, his or her name, municipality of residence, principal occupation, committee membership and period during which he or she has served as Director:

Name and Municipality of Residence	Director Principal Occupation	<u>Since</u>
John T. Baldwin <sup>(3)</sup> London, England	Corporate Director	2010
Derek S. Blackwood <sup>(2)</sup> Houston, Texas, U.S.A.	CEO, Vepica Group, an engineering, procurement and construction contractor serving the oil and gas, petrochemical and other industries	2011
James W. Derrick <sup>(3)</sup> Buffalo, New York, U.S.A.	CEO, Derrick Corporation, a designer and manufacturer of solids control equipment used on deep oil and gas drilling rigs and mining and industrial processing equipment.	2007
Kevin J. Forbes <sup>(1)</sup> West Sussex, England	Partner, Epi-V LLP, a specialist oilfield technology investment company.	2014
Michael S. Hanley <sup>(1)</sup> Mount-Royal, Quebec, Canada	Corporate Director	2015
Stephen M. Orr Toronto, Ontario, Canada	Chief Executive Officer, Shawcor Ltd.	2014
Pamela S. Pierce <sup>(2)</sup>	Executive Vice-President and Partner,	2014

Houston, Texas, U.S.A. Ztown Investments, a private oil and gas

investment firm.

Paul G. Robinson Chair of the Board, Shawcor Ltd. 2001

Toronto, Ontario, Canada President and CEO

Litens Automotive Group,

an automotive component and systems

supplier with global operations.

E. Charlene Valiquette (1)(3) Corporate Director 2005

Pembroke, Ontario, Canada

Donald M. Wishart<sup>(2)</sup> Corporate Director 2015

Calgary, Alberta, Canada

(1) Audit Committee

(2) Compensation and Organizational Development Committee

(3) Nominating and Governance Committee

Directors are elected annually at each Annual Meeting of shareholders to hold office until the next Annual Meeting of shareholders or until their successors have been duly elected.

#### 8.1.2 Officers

The following sets out for each executive Officer of the Company, his or her name, municipality of residence and position with the Company as of the date hereof:

Name and Municipality	Offices with Shawcor Ltd.
of Residence	and Principal Occupation

Paul G. Robinson Chair of the Board, Shawcor Ltd.

Toronto, Ontario, Canada

Stephen M. Orr Chief Executive Officer

Toronto, Ontario, Canada

Gary S. Love Senior Vice President, Finance Oakville, Ontario, Canada and Chief Financial Officer

Darrell R. Ewert Senior Vice President, Legal

King City, Ontario, Canada & Secretary

During the past five years, all of the Company's Directors and Officers have held their present principal occupations or other positions as noted opposite their respective names except:

John T. Baldwin was the Vice President, Communications & External Affairs for the Southern Corridor for BP, London, England from January 2014 until his retirement in July 2014. From

July 2012 to January 2014 he was the Vice President for the Southern Corridor for BP. From October 2007 to July 2012 he was the Group Political Advisor for BP.

Derek S. Blackwood has been the Chief Executive Officer of Vepica Group since September 2015. Prior to September 2015, Mr. Blackwood was a business consultant to Wood Group, since his retirement from Wood Group in December 2013. From April 2011 to December 2013, he was the President (Americas) of Wood Group PSN.

Darrell R. Ewert became Senior Vice-President, Legal & Secretary in September 2016. Prior to September 2016, Mr. Ewert was the Vice-President, Corporate Affairs and Corporate Secretary. Prior to June 2013, Mr. Ewert was the Corporate Secretary of the Company.

Michael S. Hanley was the Senior Vice President, Operations and Strategy for the National Bank of Canada from 2009 to 2011.

Gary Love became the Senior Vice-President, Finance and Chief Financial Officer in September 2016. Prior to September 2016, he was Vice-President, Finance and Chief Financial Officer.

Stephen M. Orr became Chief Executive Officer of the Company on May 1, 2014 after joining the Company as President on September 3, 2013. From May 2012 to June 2013 he was the President of the Drilling Group of Schlumberger Oilfield Services. From August 2010 to May 2012 he was the President of the M-I SWACO division of Schlumberger Oilfield Services.

Donald M. Wishart retired in December 2013 as the Executive Vice President of Operations and Major Projects of TransCanada Corporation, a position he held since 2005.

As at March 7, 2017, Directors and Officers of the Company as a group beneficially owned, directly or indirectly, or exercised control or direction over 103,963 of the issued and outstanding common shares of the Company, being 0.15% of the outstanding common shares.

#### 8.2 <u>Cease Trade Orders, Bankruptcies, Penalties or Sanctions</u>

To the best of the Company's knowledge, no Director or Executive Officer,

- (a) is, as at the date hereof or has been, within the 10 years before, a director, chief executive officer or chief financial officer of any company, that while that person was acting in that capacity,
  - i. was the subject of a cease trade or similar order or an order that denied the relevant company access to any exemption under securities legislation, for a period of more than 30 consecutive days, or
  - ii. was subject to an event that resulted, after the Director or Executive Officer ceased to be a director, chief executive officer or chief financial officer, in the company being the subject of a cease trade or similar order or an order that denied the relevant company access to any exemption under securities legislation for a period of more than 30 consecutive days;

- (b) is, as at the date hereof or has been, within the 10 years before, a director or executive officer of any company, that while that person was acting in that capacity, or within a year of that person ceasing to act in that capacity, became bankrupt, made a proposal under any legislation relating to bankruptcy or insolvency or was subject to or instituted any proceedings, arrangement or compromise with creditors or had a receiver, receiver manager or trustee appointed to hold its assets; or
- (c) has, within the 10 years before the date hereof, become bankrupt, made a proposal under any legislation relating to bankruptcy or insolvency, or become subject to or instituted any proceedings, arrangement or compromise with creditors or had a receiver, receiver manager or trustee appointed to hold the assets of the Director or Executive Officer.

To the best of the Company's knowledge, none of its Directors or Executive Officers has been subject to any penalties or sanctions imposed by a securities regulatory authority or by a court relating to securities legislation, has entered into a settlement agreement with a securities regulatory authority or has been subject to any other penalties or sanctions imposed by a court or regulatory body that would likely be considered important to a reasonable investor in making an investment decision.

#### Item 9 AUDIT COMMITTEE

The Audit Committee is appointed annually by and reports to the Board. The Committee consists of three members, M. S. Hanley - Chair, E. C. Valiquette and K. J. Forbes, all of whom are independent directors and are considered by the Board to be financially literate as that term is defined by Canadian Securities Regulators. Ms. Valiquette and Mr. Hanley are Canadian Chartered Professional Accountants. Mr. Forbes' 27 years of experience as a senior executive with a leading global energy services company and his subsequent experience as a consultant and partner in an oilfield technology investment company have provided him with an understanding of accounting principles and their application, experience in analyzing and evaluating financial statements of energy services companies and an understanding of internal controls and procedures for financial reporting.

The integrity of the Company's internal control and management information systems are primarily the responsibility of management with oversight review by the Audit Committee, which meets regularly with both the Company's financial and accounting personnel and the Company's internal and external auditors to review these matters. The Audit Committee reports to the full Board with respect to any issues that arise out of such discussions.

Reviews are carried out of the work plans of both the external and the internal auditors, and the Committee meets regularly with the external and internal auditors without management present.

The Audit Committee reviews the annual and quarterly financial statements and management's discussion and analysis and recommends their approval to the Board. The Committee makes recommendations to the Board in respect of the external auditor to be proposed for appointment by the shareholders.

The following table discloses fees paid by the Company to the external auditors, Ernst & Young, during 2016 and 2015:

Fees in Millions of Dollars	2016	2015
Audit Fees	\$2.904	\$2.570
Audit-Related Fees	\$0.100	\$0.360
Tax Fees	\$0.162	\$0.388
All Other Fees	-	\$0.025
Total	\$3.166	\$3.343

A description of the services provided in connection with the "Audit-Related Fees" and "Tax Fees" is included in Appendix B to the Audit Committee Charter, attached as Schedule 1 to this AIF. The category of "All Other Fees" includes fees for tax services to expatriate employees and consulting services relating to subsidiary share structure and pension and compensation matters.

All non-audit services to be provided by the Company's auditors must be approved by the Audit Committee as outlined in the Audit Committee Charter. The complete Audit Committee Charter is attached as Schedule 1.

#### Item 10 TRANSFER AGENT AND REGISTRAR

The Company's transfer agent and registrar is CST Trust Company, located in Toronto, Ontario.

#### Item 11 MATERIAL CONTRACTS

The following are the only contracts entered into by the Company in 2016 or entered into prior to 2016 which remain in effect and which, in each case, are material and which were not entered into in the ordinary course of business:

- a. A Third Amended and Restated Credit Agreement, dated March 20, 2013, between the Company and certain of its subsidiaries, as borrowers, and The Toronto-Dominion Bank, J.P. Morgan Securities LLC and other institutions, as lenders, for an unsecured credit facility of US\$250 million, with a US\$150 million accordion feature, having a five year term. This Agreement was amended June 2014 to increase the amount of the unsecured credit facility to US \$400 million, with an option to increase it to \$550 million, and was also amended in May and December 2016 to amend certain covenants, fees and interest rates and to extend its term to December 2019 and to reduce the amount the amount of the unsecured facility to US \$317 million.
- b. A Note Purchase Agreement dated March 20, 2013, between the Company as borrower and a number of US institutions, as lenders, for the purchase of Senior Notes of the Company in an aggregate amount of \$350 million due in 2020, 2023, 2025 and 2028. This Agreement was amended in May and December 2016 to amend certain covenants, fees and interest rates.
- c. An Underwriting Agreement dated December 9, 2016 between the Company and National Bank Financial Inc., Scotia Capital Inc., AltaCorp Capital Inc., Cormark Securities Inc., BMO Nesbitt Burns Inc., HSBC Securities (Canada) Inc., Industrial

Alliance Securities Inc., J.P. Morgan Securities Canada Inc. and RBC Dominion Securities Inc. in respect of the sale by the Company of up to 5,261,250 common shares at a price of \$32.80 per share.

Copies of the above-noted agreements have been filed on SEDAR and may be viewed at www.sedar.com.

#### Item 12 <u>LEGAL PROCEEDINGS</u>

In February of 2010, the Company received indication that it and two of its subsidiaries had been named, along with several other parties, as defendants in a statement of claim issued by Canadian Natural Resources Limited ("CNRL") which claims damages in the amount of \$68,000,000 (previously \$85,000,000) plus interest and costs relating to alleged defects in a pipeline operated by CNRL in Alberta. The claim was issued in the Court of Queen's Bench of Alberta, Judicial District of Calgary, on January 29, 2010. In March 2016, the Company reached an agreement with CNRL to settle all claims for an amount provided in the Company's 2015 financial statements.

#### Item 13 <u>INTERESTS OF EXPERTS</u>

Ernst and Young LLP is the Company's auditor and is independent of the Company in accordance with the Rules of Professional Conduct of the Institute of Chartered Accountants of Ontario.

#### Item 14 ADDITIONAL INFORMATION

Additional information, including Officers' and Directors' remuneration and indebtedness, principal holders of voting shares and securities authorized for issuance under equity compensation plans, is included in the Company's Management Proxy Circular dated March 10, 2017. Additional financial information is provided in the Company's audited financial statements and Management's Discussion and Analysis for the year ended December 31, 2016. They may be found on SEDAR at www.sedar.com.

Copies of these documents may be obtained upon request from the Senior Vice President, Finance and Chief Financial Officer, Shawcor Ltd., 25 Bethridge Road, Toronto, Ontario, Canada, M9W 1M7.

Additional information relating to the Company may also be found on SEDAR at www.sedar.com and on the Company's website at www.Shawcor.com.

# SHAWCOR LTD. AUDIT COMMITTEE OF THE BOARD OF DIRECTORS CHARTER

#### A. Authority

The Audit Committee of the Board of Directors operates under authority vested by the Board of Directors and reports to the Board. The Board's oversight of the integrity of the Company's internal control and reporting systems is primarily the role of the Audit Committee, and it should meet regularly with both the Company's financial and accounting personnel and the Company's internal and external auditors to review these matters and to discuss internal controls over the financial reporting process, auditing matters and financial reporting issues. The Committee generally reports to the full Board with respect to any issues that arise out of such discussions.

The Audit Committee reviews the quarterly financial statements and Reports to Shareholders prior to their release, and reviews the Company's annual consolidated financial statements and Management Discussion and Analysis and recommends their approval to the Board. The Committee oversees the qualifications and independence of the external auditor and makes recommendations to the Board in respect of the external auditor to be proposed for appointment to the shareholders.

The authority, composition and role of the Audit Committee of the Board of Directors should reflect the requirements of the Canada Business Corporations Act, the Toronto Stock Exchange, as well as the provincial Securities Acts and any other pertinent legislation with which Shawcor Ltd. must comply. Such authority, composition and role are:

#### B. Organization

- 1. **Number and Qualifications -** Members of the Audit Committee and the Chair are appointed annually by the Board of Directors. The Audit Committee consists of such number of directors as the Board of Directors shall determine from time to time, all of whom should meet the independence and financial literacy requirements of the Toronto Stock Exchange, the provincial Securities Acts and the Canada Business Corporations Act (see Appendix A).
- **Quorum and Invitees -** A majority of the members of the Audit Committee shall form a quorum. Subject to invitation, meetings will usually include the CEO and the Vice President, Finance & CFO. Attendees may also include other directors, the external and internal auditor or other representatives and employees of the Company, as determined by the Audit Committee.

3. **Meetings** – Committee meetings shall be held at the call of the Chair of the Board, the Committee Chair, or upon the request of a majority of Committee members. It is anticipated that there will be a minimum of four meetings per year.

#### C. Role

Management is responsible for preparing the Company's financial statements and other financial information, for the fair presentation of the information set forth in the financial statements in accordance with GAAP, for establishing, documenting, maintaining and reviewing systems of internal control and for maintaining the appropriate accounting and financial reporting principles and policies designed to assure compliance with accounting standards and applicable laws. The Audit Committee's role is one of oversight. The role of the Audit Committee includes but is not limited to:

#### 1. Financial Information

- 1) Reviewing with management and the auditors the annual financial statements of the Company, including, without limitation, the judgement of the external auditors as to not only the acceptability but also the quality and appropriateness of the Company's accounting principles as applied in its financial reporting, and reporting and recommending the financial statements to the Board of Directors for approval.
- 2) Reviewing any material change to the Company's accounting principles and practices as recommended by senior management or the external auditors or which may result from changes to applicable generally accepted accounting principles, including international financial reporting standards, where applicable.
- 3) Reviewing financial information (such as the Management Discussion and Analysis) to be included in all regulatory filings and other public disclosure (such as annual and quarterly financial statements, prospectuses, information circulars and annual and interim earnings press releases).
- 4) Reviewing quarterly results, reports to shareholders, any Management Discussion and Analysis and accompanying press releases, and making recommendations for approval to the Board.
- 5) Reviewing the use of any "pro forma" or adjusted information not in accordance with applicable generally accepted accounting principles, including international financial reporting standards, where applicable.

#### 2. Relations with Auditors

a) Overseeing and evaluating the work of the external auditors, including the resolution of disagreements between management and the external auditors regarding financial reporting. The external auditors shall report directly to the Committee and the Committee should meet regularly with the internal and external auditors privately,

without management present.

- b) Reviewing and approving in advance the terms of engagement, audit fees and scope of the external audit and recommending to the Board the appointment and proposed audit fees of the external auditor.
- c) Reviewing and discussing with the external auditors all significant relationships that the external auditors and its affiliates have with the Company and its affiliates in order to seek to determine the external auditor's independence, including:
  - i. approving all non-audit assignments undertaken by the external auditors. Reviewing periodically the detailed policies and procedures dealing with preapproved non-audit services. In addition, the Committee at its discretion may delegate pre-approvals of other non-audit services to the Chair of the Committee, subject to ratification by the full Committee at the next scheduled meeting. Appendix B sets out the Committee's current policy with respect to those non-audit services for which the independent auditor may be engaged; and
  - ii. approving any hiring of partners and employees and former partners and employees of the external auditor.
- d) Reviewing the external auditors' internal quality control procedures and any internal or external reviews of investigation of the auditors' professional practices.
- e) Requiring the external auditors to perform such supplemental reviews or audits as the Committee may deem desirable.

#### 3. Internal Controls

- a) Reviewing the integrity of internal controls with senior management, the external auditors and the internal auditor. Reviewing the external and internal auditors' recommendations on internal control matters, following-up on any identified weaknesses and management's response. Being satisfied that adequate procedures are in place for the review of the public disclosure of financial information extracted or derived from the financial statements of the Company and periodically assessing the adequacy of those procedures.
- b) Discussing with the external auditors any difficulties or disputes that arose with senior management during the course of the audit and the adequacy of senior management's responses in correcting audit-related deficiencies.
- c) Reviewing the Company's processes for the CEO and CFO certifications required by applicable securities laws with respect to the Company's annual and interim filings.

#### 4. Other Matters

- a) Reviewing the Company's accounting policies, changes thereto, financial reporting and the internal audit process.
- b) Reviewing significant transactions, contingent liabilities and the manner in which these matters are treated in the Company's financial disclosure and financial statements.
- c) Reviewing emerging accounting issues.
- d) Reviewing internal audit plans for the up-coming year.
- e) Discussing with management the Company's risk management policies and processes and reviewing with management and the external and internal auditors the effectiveness and efficiency of the same, including reviewing the Company's program to obtain insurance to mitigate risks where appropriate.
- f) Reviewing and making recommendations to the Board on the appointment of and succession planning for the Vice President Finance and Chief Financial Officer. Reviewing and making recommendations to management on the appointment and evaluation of the internal auditor(s). Periodically reviewing the structure and performance of the Company's finance organization.
- g) Conducting or authorizing investigations into any matter that the Committee believes is within the scope of its responsibilities.
- h) Retaining such special legal, accounting, financial or other consultants as the Committee may determine to be necessary to carry out, at the Company's expense, the Committee's role.
- i) Reporting through the Committee Chair to the Board following meetings of the Committee on matters considered by the Committee, its activities and matters related to this Charter. Minutes of the Committee's meetings will be made available to all members of the Board.
- j) Periodically reviewing and reassessing the adequacy of this Charter and the internal audit charter and annually reviewing and assessing the performance of the Audit Committee.

#### 5. Employee Questions and/or Concerns

a) Monitoring policies and procedures for dealing with questions and complaints regarding accounting, internal accounting controls, auditing and financial disclosure matters and the confidential anonymous submissions by employees of concerns regarding such matters.

b) Monitoring compliance with the Company's Code of Conduct and the confidential anonymous submissions by employees of concerns regarding such matters.

#### D. General

The Committee's role is an oversight role and nothing contained in this Charter is intended to require the Committee to ensure the Company's nor any other person's compliance with applicable laws or regulations.

The Committee is a committee of the Board of Directors and is not and shall not be deemed to be an agent of the Company's security holders for any purpose whatsoever. The Board of Directors may, from time to time, permit departures from the terms hereof, either prospectively or retrospectively, and no provision contained herein is intended to give rise to civil liability to security holders of the Company or other liability whatsoever.

## SHAWCOR LTD. AUDIT COMMITTEE CHARTER APPENDIX A DEFINITIONS

#### **Financially Literate**

Means the ability to read and understand a set of financial statements that present a breadth and level of complexity of accounting issues that are generally comparable to the breadth and complexity of the issues that can reasonably be expected to be raised by Shawcor's financial statements.

#### **Independence**

An Audit Committee member is independent if the member has no direct or indirect material relationship with Shawcor or its subsidiaries and affiliates. A material relationship means a relationship which could, in the view of Shawcor's Board of Directors, be reasonably expected to interfere with the exercise of a member's independent judgment.

In addition to any determination which may be made by the Board of Directors of Shawcor, the following individuals will be considered to have a material relationship with Shawcor:

- a) an individual who is, or was within the last three years, an executive officer or employee of Shawcor;
- b) an individual whose immediate family member is, or was within the last three years, an executive officer of Shawcor;
- c) an individual who is a partner or employee of Shawcor's auditor;
- d) an individual who was a partner or employee of Shawcor's auditor within the last three years and personally worked on Shawcor's audit during that period;
- e) an individual whose spouse, minor child or stepchild, or child or stepchild who shares a home with the individual; is a partner of Shawcor's auditor, is an employee of Shawcor's auditor and participates in its audit, assurance or tax compliance practice or was, within the last three years, a partner or employee of Shawcor's auditor and personally worked on Shawcor's audit within that time;
- f) an individual who, or whose immediate family member, is or has been within the last three years, an executive officer of an entity if any of Shawcor's current executive officers serves or served at that same time on the entity's compensation committee:

- g) an individual who received, or whose immediate family member who is an executive officer of Shawcor received, more than \$75,000 in direct compensation from Shawcor during any 12 month period during the last three years, other than in his or her capacity as a Board member and other than fixed amounts of remuneration received under a retirement plan for prior service where such compensation is not contingent on continued service;
- h) an individual who accepts, directly or indirectly, fees from Shawcor, other than in his or her capacity as a member of the Board or any Board committee, or part-time Chair or Vice Chair of the Board or any Board committee; and
- i) an individual who is an "affiliated entity" of Shawcor or any of its subsidiaries, within the meaning of National Instrument 52-110.
- 1) For purposes hereof, "Shawcor" includes Shawcor Ltd. and any subsidiary thereof; and
- 2) For purposes of paragraph (h), indirect acceptance of a fee by an individual includes acceptance of a fee by (i) an individual's spouse, minor child or stepchild or child or stepchild who shares the individual's home, or (ii) an entity in which such individual is a partner, member, officer or other comparable position and which provides accounting, consulting, legal, investment banking or financial advisory services to Shawcor.

#### SHAWCOR LTD AUDIT COMMITTEE CHARTER

#### APPENDIX B

#### AUDIT AND NON-AUDIT SERVICES

#### **Statutory Audits**

#### **Audit services include:**

- The audit and/or review of annual and quarterly financial statements of Shawcor, its subsidiaries and affiliates
- Other procedures required to be performed by the independent auditor to be able to form an
  opinion on the Company's consolidated financial statements, including information systems
  and procedural reviews.

#### **Audit Related Services**

Audit related services are the professional attestation and related services that are reasonably related to the proper completion of the audit of the Company's financial statements. The Audit Committee has granted general pre-approval to the following audit related or other non-tax services performed by the external auditors provided in each case that the Audit Committee is informed periodically of all such services provided:

- Due diligence services pertaining to potential business acquisitions/dispositions
- Accounting consultations relating to accounting, financial reporting and disclosure issues
- Assistance with understanding and implementing new accounting and financial reporting standards and guidance
- Special audits on control procedures
- Prospectus and other regulatory audit and filing assistance

All other non-tax related services must be specifically approved by the Audit Committee.

#### Tax Related Services

The Audit Committee has granted general pre-approval to the following tax related services supplied by the external auditor provided in each case that the Audit Committee is informed periodically of all such services provided:

- Assistance with completion and filing of corporate tax returns
- Assistance with understanding and implementing new tax rules
- Tax consultations related to specific transactions
- Assistance and advice with respect to general corporate tax planning
- Discussions and negotiations with taxation authorities concerning the Company's tax affairs.

All other tax related services must be specifically approved by the Audit Committee.

#### **Non Audit Services**

The Chair of the Audit Committee may pre-approve non-audit services to be provided by the external auditor providing all such assignments are reviewed with the full Committee at the next scheduled meeting.

#### **Prohibited Services**

#### The following services are not to be provided by the external auditor:

- Bookkeeping or other services related to the accounting records or financial statements
- Appraisal, valuation or fairness opinions
- Actuarial services
- Internal audit
- Human resource assistance
- Legal advice
- Legal services
- Investment banking services
- Management functions