VITREOUS GLASS INC.
TWELVE MONTHS ENDED SEPTEMBER 30, 2019
MANAGEMENT DISCUSSION AND ANALYSIS

This Management Discussion and Analysis ("MD&A") is dated December 10, 2019.

The following is management's discussion and analysis of the business and financial results of Vitreous Glass Inc. ("Vitreous" or the "Company") for the three months and for the year ended September 30, 2019. This MD&A should be read in conjunction with the audited financial statements of the Company for the year ended September 30, 2019. The financial statements have been prepared in accordance with International Financial Reporting Standards ("IFRS"). The financial statements and additional information relevant to the Company's activities can be found on SEDAR at www.sedar.com. Results are reported in Canadian dollars unless otherwise noted.

Advisory Regarding Forward Looking Statements and Information

This MD&A contains forward looking statements and information. Forward looking statements and information are based upon current expectations and assumptions that involve a number of risks and uncertainties, certain of which are beyond the Company's control and could cause actual events or results to differ materially from those reflected in the MD&A. Forward-looking statements and information are based upon the estimates and opinions of the Company's management at the time the statements were made.

Readers of this MD&A are strongly cautioned that any statements relating to the future business prospects of the Company (and therefore its ability to meet its financial obligations, and potentially continue to pay dividends) are entirely subject to the continuation of satisfactory business conditions. These include, but are not limited to, availability of waste glass for processing, demand for fiberglass building insulation by the consumer, willingness and ability of the Company's customers to continue to use waste glass as part of their raw material, availability of hauling product to and from the Company's plant, adequate margins to cover the Company's costs, and the financial health of the Company's customers.

In particular, forward looking statements and information include assumptions that (i) there will be continuing market demand for fiberglass insulation; (ii) the Company's customers will continue to operate their Alberta plants at a level where historical levels of demand for glass are present; and (iii) glass supply and transportation continue to be available on an economically viable basis. Management believes that Vitreous has sufficient cash and available credit facilities to meet its obligations as they fall due, and currently anticipates no change in the ability to meet such obligations on an ongoing basis.

The reader is cautioned that historical results are not necessarily indicative of future performance. The forward looking statements are made as of the date of this MD&A and the Company does not undertake any obligation to update publicly or revise any of the included forward-looking statements, whether as a result of new information, future events or otherwise, except as required by applicable securities laws.

The Company

Vitreous operates a waste glass processing plant at Airdrie, Alberta. The plant gathers post-consumer waste glass from Alberta and elsewhere, crushes it, removes contaminants, and sells the final product to three manufacturers of fiberglass building insulation for use as a raw material in their production facilities in Alberta.

Sales

Sales for the three months ended September 30, 2019 increased by 6.4% from the same three months of the preceding fiscal year due to an increase in average product selling price of 14.8%, offset by a 7.4% decrease in volume of product sold. The increase in average product selling price was due in part to a temporary surcharge paid by some customers on a temporary additional source of raw glass that was purchased at a higher than usual cost. This arrangement terminated effective September 1, 2019.

Sales for the year ended September 30, 2019 decreased by 1.4% from the preceding fiscal year due to a 6.7% decrease in volume of product sold, offset by an increase in average product selling price of 5.6%. The decrease in volume of product sold in the year is primarily due to one major customer deciding to suspend operations for approximately three and one half months in the year, during which time they took no product from the Company, as further discussed under "Comments on selected quarterly information". The increase in average product selling price was due in part to a temporary surcharge paid by some customers on a temporary incremental additional source of raw glass that was purchased at a higher than usual cost. This arrangement terminated effective September 1, 2019.

During the periods ended September 30, 2019 and 2018, all sales were to three customers in the fiberglass insulation manufacturing industry, of which two customers exceeded 10% of total sales. Sales to these two customers comprised 63.1% and 34.1% respectively of total sales for the three months ended September 30, 2019 (2018 – 46.6% and 38.3% respectively). Sales to each of these two customers comprised 59.6% and 31.7% respectively of total sales for the year ended September 30, 2019 (2018 – 53.9 and 36.6% respectively). As at September 30, 2019 95% (September 30, 2018 – 91%) of accounts receivable are due from those two customers.

Fluctuations in customer demand for the Company's product and the supply of raw glass are discussed under "Business Risks".

Cost of sales, not including amortization

Cost of sales, not including amortization, as a percentage of sales revenue for the three months ended September 30, 2019 increased by 11.4 percentage points to 57.7% for the current fiscal year from 46.3% for the same period of the preceding fiscal year. This increase in cost of sales as a percentage of sales revenue is due to (a) higher average cost per unit of raw glass consumed in the three months ended September 30, 2019 compared to the same period of the prior year, and (b) higher costs of repairs and maintenance offset by a lesser decrease in other facility costs. The higher average cost of glass purchased included a temporary surcharge paid on a temporary additional source of raw glass that was purchased at a higher than usual cost. This arrangement terminated effective September 1, 2019. Absent the impact of this temporary additional source of glass, the cost of sales, not including amortization, as a percentage of sales revenue for the three months ended September 30, 2019 would have increased by 5.9 percentage points to 52.2% for the current fiscal year from 46.3% for the same period of the preceding fiscal year.

Cost of sales as a percentage of sales revenue for the year ended September 30, 2019 increased by 5.8 percentage points to 53.5% for the current fiscal year from 47.7% for the preceding fiscal year. This increase in cost of sales as a percentage of sales revenue is due to (a) higher average cost per unit of raw glass consumed in the year ended September 30, 2019 compared to the prior year and (b) higher costs of repairs and maintenance offset by a lesser decrease in other facility costs. The higher average cost of glass purchased included a temporary surcharge paid on a temporary additional source of raw glass that was purchased at a higher than usual cost. This arrangement terminated effective September 1, 2019. Absent the impact of this temporary additional source of glass, the cost of sales, not including amortization, as a percentage of sales revenue for the year ended September 30, 2019 would have increased by 4.2 percentage points to 51.9% for the current fiscal year from 47.7% for the preceding fiscal year.

General and administrative expenses

General and administrative expenses for the three months ended September 30, 2019 decreased by 18.0% from the same period of the preceding fiscal year due to (a) a reduction in administrative expenses, and (b) the incentive based nature of compensation for the chief executive officer, which decreased by 15.7%. This incentive based compensation is primarily determined by the gross margin amount, which decreased by 16.2% in the three months ended September 30, 2019 compared to the same period of the preceding fiscal year.

General and administrative expenses for the year ended September 30, 2019 decreased by 9.2% from the same period of the preceding fiscal year primarily due to the incentive based nature of compensation for the chief executive officer, which decreased by 13.5%. This incentive based compensation is primarily determined by the gross margin amount, which decreased by 12.3% in the year ended September 30, 2019 compared to the preceding fiscal year.

Accounts receivable

Accounts receivable at September 30, 2019 were consistent with sales in the period leading up to the end of the fiscal year. All accounts receivable as at September 30, 2019 are considered collectible.

Inventory and supply

Inventory is maintained at levels that are dictated largely by available supply and customer demand as discussed under “Business Risks”.

The total carrying value of inventory on hand as at September 30, 2019, comprising primarily raw glass on hand plus a modest amount of crushed glass in process, increased by 63.8% from the value on hand at September 30, 2018. This increase is due to the combined effect of:

(a) a 44.2% increase in the quantity of the raw glass portion of inventory on hand at September 30, 2019 compared to September 30, 2018. This increase arose due to a 2.8% increase in the total volume of raw glass purchased in the year combined with a 6.7% decrease in total volume of product sold in the year. The decrease in volume of product sold during the year is discussed “Sales”.

(b) a 16.2% increase in the per-unit carrying cost of the raw glass portion of inventory at September 30, 2019 compared to September 30, 2018. This increase in per-unit carrying cost is primarily due to a 12.1% increase in the average cost per unit of glass purchased in the current year compared to the prior year.

As discussed under “Business Risks”, the Company accepts deliveries of raw glass from its major supplier and other suppliers as it becomes available. See comments under “Business Risks”.

Purchase of property, plant and equipment

In the three months ended September 30, 2019, the Company spent $24,874 on additions to property, plant and equipment compared to $15,371 in the same period of the prior fiscal year. Additions in the current period comprise $24,874 for additions to plant equipment, compared to $15,371 on additions to property, plant and equipment in the same period of the prior fiscal year (comprising $12,272 to the building and $3,099 for computer equipment).

In the year September 30, 2019, the Company spent $139,943 on additions to property, plant and equipment compared to $17,555 in the prior fiscal year. Additions in the current year comprise $102,650 for a front-end loader, and $37,293 for additions to plant equipment, compared to $17,555 on additions to property, plant and equipment in the prior fiscal year (comprising $12,272 to the building, $3,838 for computer equipment, and $1,445 for furniture and fixtures). Parts classed as capital spares in the amount $51,893 were reclassified into ‘Property, Plant and Equipment’ in the year ended September 30, 2019, having previously been classified as spare parts included in ‘Prepaid Expenses’.

Cash and bank operating lines of credit

The Company continues to carry an available operating line of credit in an authorized amount of $750,000, secured by a general security agreement covering all property of the Company except for accounts receivable from one major customer. This line of credit is to be used to finance short term operating cash requirements. The Company used this credit facility on four occasions throughout the year. In each instance, the usage was for short terms ranging from overnight to several business days, in amounts ranging from $10,000 to $100,000. No balance was outstanding as at September 30, 2019 ($Nil as at September 30, 2018).

Commitments

The Company is committed to monthly payments of $2,000 under a property lease expiring May 31, 2022 for storage of the Company’s raw material inventory.

Business Risks

All production from the Company's Alberta glass plant is sold to two large customers and one smaller one in the fiberglass manufacturing industry in Alberta, which is heavily dependent on housing starts in Western Canada and the Northwest United States.

Inventory is maintained at levels that are dictated largely by available supply and customer demand. The Company is subject to unpredictable variations in demand for its product and in supply of raw glass. The Company is required to manage an appropriate balance between supply and demand while maintaining an appropriate level of inventory of raw glass on hand.

Revenue is dependent upon the quantity of Vitreous product purchased by its customers. Customer demand is in turn driven by demand for fiberglass building insulation that is affected by seasonal variations in the building industry, cyclical variations in the building industry and unexpected events including events of a nature that can cause unexpected increases or decreases in building activity. The Company ships to its customers based on their day-to-day consumption.

As more fully discussed under "Comments on selected quarterly information", during this fiscal year one major customer suspended operations for a three-month period during which time this customer suspended placing any orders or shipments of product from the Company. As a result, sales to this customer in the three months were nil. The customer advised the Company that this suspension of operations was temporary, and that normal operations would resume in due course, which did occur approximately three months later. The customer advised the Company that, in attempt to achieve a lower total production cost per unit for the same total production quantity, the customer may increase their production quantity (and their orders of product from the Company) for some periods, and suspend production for some periods from time to time. In this event, the Company may experience greater volatility in quantity of product sold to this major customer.

On the supply side the Company generally must accept glass as it becomes available from one major supplier, and two other suppliers of modest scale, all three of which involve a different cost, including hauling. The Company makes every effort not to interrupt supply. Interruptions in supply cause operational challenges for the Company's suppliers that have resulted in certain former suppliers severing their relationship with the Company in the past. The loss of any of the Company's current suppliers could have an adverse impact on the operations of the Company.

For the past several years, demand for product has been exceeding the available supply of raw glass, except for a temporary three month period in the current year when one major customer decided to suspend operation of their plant, during which time this customer took no deliveries of our product. Accordingly the Company has limited its sales to levels determined by its supply of raw glass. This limit will remain in effect until demand for product is equal to or exceeded by the available supply of raw glass on an annualized basis. The Company continues to seek additional sources of raw glass.

There are indications in the North American market that there has been a trend of decline in the market share of glass containers versus other beverage containers. As discussed in "Inventory and Supply", the volume of raw glass available to the Company increased slightly in the current year ended September 30, 2019, after having declined slightly in the prior year ended September 30, 2018 compared to the 2017 fiscal year. There is a risk that the volume of glass beverage containers sold may decline which would result in a decline in the available supply of raw glass. Furthermore, the return of recyclable glass beverage containers to depots is erratic in quantity and timing. The Company is not able to forecast the volumes of raw glass that may be available in the future.

The Company continues to monitor the balance between supply and demand. See comments under "Inventory and Supply".

Liquidity and capital resources

The Company's debt at September 30, 2019 comprised normal trade payables, accrued liabilities and income taxes payable. Assuming that there is continuing market demand for fiberglass insulation, assuming that its customers continue to operate their Alberta plants at a level where sufficient levels of demand for glass are present, and assuming that glass supply and transportation continue to be available on an economically viable basis, management believes that Vitreous will generate sufficient cash flows from operations and has available credit facilities to meet its obligations as they fall due, and anticipates no change in the ability to meet such obligations on an ongoing basis.

Any modest plant capital expenditures are generally financed from ongoing cash flows from operations before payment of dividends. The Company also sets aside funds to cover the possibility of a major capital replacement or upgrade. The amount of such funds set aside is $361,992 as at September 30, 2019 ($462,286 as at September 30, 2018).

Share capital

As at September 30, 2019 and December 10, 2019, there were 6,283,667 common shares ("Common Shares") outstanding (6,283,667 at September 30, 2018).

Effective November 12, 2018, the Board of Directors granted to Meredith Cashion, a director of the Company, an option to acquire 100,000 Common Shares at an option price of $3.54 per share expiring on November 11, 2023. This option for 100,000 Common Shares remains outstanding as at December 10, 2019. As at September 30, 2019 there were options outstanding for 100,000 Common Shares (nil at September 30, 2018).

Selected annual information

The following charts and related comments provide selected annual information for the fiscal years 2019, 2018 and 2017.

Year ended September 30:	***2019***	***2018***	***2017***
Sales	$8,504,942	$8,627,657	$8,226,180
Net income	$1,768,892	$2,120,257	$1,917,980
Per share	$0.28	$0.34	$0.30
Diluted per share	$0.28	$0.34	$0.30
Total assets	$4,899,459	$5,516,394	$5,512,130
Long-term financial liabilities	$ 0	$ 0	$ 0
Dividends paid, per share	$0.38	$0.34	$0.34

Comments on selected annual information

The volume of product sold is dependent upon the volume of supply of raw glass available for purchase as discussed under "Inventory and Supply" and "Business Risks".

Sales for the year ended September 30, 2019 decreased by 1.4% from the preceding fiscal year due to a decrease in volume of product sold of 6.7% offset by an increase in average product selling price of 5.6%, as discussed under "Sales".

In the year ended September 30, 2018, sales increased by 4.9% from the 2017 fiscal year due to an increase in volume of product sold of 1.6% combined with an increase in average product selling price of 3.2%.

Gross Margin before amortization as a percentage of sales revenue for the year ended September 30, 2019 decreased by 5.8 percentage points to 46.5% for the current fiscal year from 52.3% for the preceding fiscal year, as discussed under "Cost of sales, not including amortization".

Gross margin before amortization as a percentage of sales revenue for the year ended September 30, 2018 increased by 1.8 percentage points to 52.3% for the 2018 fiscal year from 50.5% for the 2017 fiscal year. This increase in gross margin before amortization as a percentage of sales revenue is due to (a) lower cost of repairs and maintenance for the 2018 fiscal year, and (b) lower cost per unit of glass sold in the 2018 fiscal year, and (c) higher average product selling price per unit in the 2018 fiscal year compared to the 2017 fiscal year.

Net income for the year ended September 30, 2019 decreased by 16.6% due to the combined factors of (a) a 1.4% decrease in sales as discussed under "Sales, (b) a 10.5% increase in cost of sales not including amortization, as discussed under "Cost of sales, not including amortization", and (c) offset by a 9.2% decrease in general and administrative expenses as discussed under "General and administrative expenses".

Net income for the year ended September 30, 2018 increased by 10.5% over the 2017 fiscal year primarily due to an 8.5% increase in amount of gross margin before amortization in the current year over the prior year.

For a discussion of dividends paid, see below in "Shareholder value and dividends"

Selected quarterly information

The following charts and related comments provide selected information for the eight most recent fiscal quarters.

Quarter ended:	***Sep 19***	***Jun 19***	***Mar 19***	***Dec 18***
Sales	$2,484,810	$1,447,985	$2,199,039	$2,373,108
Net income	$495,774	$223,751	$474,688	$574,679
Per share	$0.07	$0.04	$0.08	$0.09
Diluted per share	$0.07	$0.04	$0.08	$0.09

Quarter ended:	***Sep 18***	***Jun 18***	***Mar 18***	***Dec 17***
Sales	$2,335,563	$1,960,348	$2,156,899	$2,174,847
Net income	$597,843	$435,950	$507,941	$578,523
Per share	$0.10	$0.07	$0.08	$0.09
Diluted per share	$0.10	$0.07	$0.08	$0.09

Comments on selected quarterly information

Quarterly results vary significantly depending upon demand and supply factors beyond the control of the company as discussed under "Business Risks".

For the three months ended September 30, 2019, sales increased by 6.4% from the same three months of the preceding fiscal year due to an increase in average product selling price of 14.8%, offset by a 7.4% decrease in volume of product sold. The increase in average product selling price was due in part to a temporary surcharge paid by some customers on a temporary incremental additional source of raw glass that was purchased at a higher than usual cost. This arrangement terminated effective September 1, 2019. Net income for the three months ended September 30, 2019 decreased by 17.1% compared to the same quarter of the prior year, primarily due to an increase in cost of sales not including amortization, as discussed under "Cost of sales, not including amortization".

Financial performance of the Company in the three months ended June 30, 2019 was significantly impacted by a decision of one of the Company's two major customers to suspend operations of their plant for approximately three and one half months from late March 2019 to early July 2019. From March 30, 2019 to July 11, 2019 the customer suspended placing any orders or shipments of product from the Company. In result, sales to this customer in the three months ended June 30, 2019 were nil. The customer advised the Company that this suspension of operations was temporary, and that normal operations would resume in July 2019. On July 12, 2019 the customer resumed placing orders for product, and shipments to the customer have resumed to date at levels equal to or above this customer's weekly pattern in the several quarters prior to the three months ended June 30, 2019. The customer advised the Company that, in attempt to achieve a lower total production cost per unit for the same total production quantity, the customer may increase their production quantity (and their orders of product from the Company) for some periods, and suspend production for some periods from time to time. In this event, the Company may experience greater volatility in quantity of product sold to this customer, as discussed under "Business risks".

In the three months ending June 30, 2019, sales decreased by 26.1% compared to the same quarter of the prior year. in the same three months of the prior year, primarily due to a 27.2% decrease in the volume of product sold in the current quarter compared to the same quarter of the prior year, due to the temporary suspension of production of one major customer as discussed above. The decrease in volume of product sold was offset slightly by a 1.5% increase in the average selling price per unit of product sold in the three months ended June 30, 2019 compared to the same quarter of the prior year. Net income for the three months ended June 30, 2019 decreased by 48.6% compared to the same quarter of the prior year primarily due to the decrease in volume of product sold in the quarter compared to the same quarter of the prior year.

For the three months ended March 30, 2019, sales increased by 2.0% from the same quarter of the prior year, due to a 2.0% increase in the average selling price per unit sold on the same volume of product sold in the current quarter compared to the same quarter of the prior year. While gross margin increased by 4.1% from the same quarter of the prior year, net income for the three months ending March 31, 2019 declined by 6.5% compared to the same quarter of the prior year due to a non cash charge in the current quarter to record a stock-based compensation expense arising from an option being granted to a director. This non-cash charge does not affect distributable cash.

For the three months ended December 31, 2018, sales increased by 9.1% due to a 5.8% increase in volume sold combined with a 3.1% increase in the average selling price per unit sold in the current quarter compared to the same quarter of the prior year. Net income decreased by 0.7% for the three months ended September 30, 2018 compared to the same quarter of the prior year due to the increase in sales being offset by an increase in cost of sales per unit sold, arising from a higher cost of raw glass consumed in the current quarter compared to the same quarter of the prior year.

Critical accounting estimates

IFRS require management to make estimates and assumptions that reported amount of assets, liabilities, revenue and expenses during the reporting periods presented. Significant estimates include the assessment of the recoverability of carrying value of the Company's inventory, property plant and equipment, and deferred income taxes. By their nature, these estimates are subject to measurement uncertainty and the effect on the financial statements of changes in such estimates in future periods could be significant.

The Company has no off-balance sheet arrangements.

Related party transactions

The Company obtained (and continues to obtain) consulting services from David Birkby, a director of the Company, at a cost of $2,000 in the three months ended September 30, 2019 and $8,000 for the year ended September 30, 2019 ($2,000 and $8,000 for the same periods in the prior fiscal year). These services are related to plant operations and plant management.

The Company obtained (and continues to obtain) consulting services from Timothy H. Rendell CPA, a director of the Company, at a cost of $12,533 in the three months ended September 30, 2019 and $48,109 for the year ended

September 30, 2019 ($10,130 and $40,628 for the same periods in the prior year). These services are related to providing Chief Financial Officer services under a personal services contract.

Future plans

The Company plans to continue to manage its waste glass processing operation cautiously, and consistent with past practices.

Shareholder value and dividends

Having reviewed a variety of alternatives over the years, the Company's Board has concluded that the optimum value for shareholders at this time is obtained by continuing to run the Company's business and to pay dividends as the results of business allow. Dividend amounts are primarily affected by net cash flow from operations, timing of receipts on accounts receivable, timing of payment of accounts payable, and fluctuations in inventory levels.

Since September 30, 2017 the Company has paid cash dividends on its Common Shares as follows:

November 15, 2019	$0.03
August 15, 2019	$0.05
May 15, 2019	$0.10
February 15, 2019	$0.13
November 15, 2018	$0.10
August 15, 2018	$0.06
May 18, 2018	$0.08
February 15, 2018	$0.12
November 15, 2017	$0.08

The Company's ability to pay dividends is contingent on the ongoing results of operation of the business. The Company believes that quarterly dividends, if any, should reflect actual business results of the most recent completed quarter.

All dividends paid to date are "eligible" dividends when calculating the dividend tax credit for income tax purposes.