PEARL RIVER HOLDINGS LIMITED

MANAGEMENT'S DISCUSSION AND ANALYSIS
Six months ended September 30, 2019

Forward-Looking Information

This interim management discussion and analysis contains certain forward-looking statements and information relating to Pearl River Holdings Limited ("**Pearl**" or the "**Company**"). All statements, other than statements of historical fact, included herein may be forward-looking information. Generally, forward-looking information may be identified by the use of forward-looking terminology such as "plans", "expects" or "does not expect", "proposed", "is expected", "budgets", "scheduled", "estimates", "forecasts", "intends", "anticipates" or "does not anticipate", or "believes", or variations of such words and phrases, or by the use of words or phrases which state that certain actions, events or results may, could, would, or might occur or be achieved. This forward-looking information reflects the Company's current beliefs and is based on information currently available to the Company and on assumptions the Company believes are reasonable. These assumptions include, but are not limited to, the level of activity in the plastics industry and the economy generally, consumer interest in the Company's products, and future costs and expenses being based on historical costs and expenses, adjusted for inflation. Forward-looking information is subject to known and unknown risks, uncertainties and other factors that may cause the actual results, level of activity, performance or achievements of the Company to be materially different from those expressed or implied by such forward-looking information. Such risks and other factors may include, but are not limited to: general business, economic, competitive, political and social uncertainties; fluctuations in raw material costs; competition; lack of insurance; changes in legislation, including environmental legislation, affecting the Company; timing and availability of external financing on acceptable terms; and lack of qualified, skilled labour or loss of key individuals. Although the Company has attempted to identify important factors that could cause actual results to differ materially from those contained in forward-looking information, there may be other factors that cause results not to be as anticipated, estimated or intended. Accordingly, readers should not place undue reliance on forward-looking information. The Company does not undertake to update any forward-looking information, except in accordance with applicable securities laws.

Basis of Discussion and Analysis

The following management discussion and analysis of the financial condition and results of operations of the Company and other information is dated November 29, 2019 and should be read in conjunction with the Company's condensed interim consolidated financial statements and notes thereto as at and for the nine months ended September 30, 2019. These condensed interim consolidated financial statements have been prepared in accordance with International Financial Reporting Standards ("IFRS") applicable to the preparation of interim financial statements including International Accounting Standard 34 – Interim Financial Reporting and have been prepared following the same accounting policies and methods of computation as the annual consolidated financial statements for the year ended December 31, 2018.

These condensed interim consolidated financial statements include only significant events and transactions affecting the Company during the current fiscal period and do not include all disclosures normally provided in the Company's annual financial statements. As a result, these condensed interim consolidated financial statements should be read in conjunction with the Company's audited financial statements for the year ended December 31, 2018. The Company's consolidated financial statements for the year ended December 31, 2018 and related MD&A can be obtained on the System for Electronic Document Analysis and Retrieval ("SEDAR"). Interim results are not necessarily indicative of the results expected for the fiscal year.

In this MD&A, Pearl and its subsidiaries are referred to collectively as "Pearl", the "Group" or the "Company" unless the context requires otherwise.

FINANCIAL HIGHLIGHTS

	2019		2018	
	Quarter ended September 30 (RMB)	**Year to date (RMB)**	**Quarter ended September 30 (RMB)**	**Year to date (RMB)**
Revenue	75,879,866	200,664,807	71,136,131	203,351,553
Gross profit	17,271,935	46,057,117	22,023,542	48,321,659
Gross margin	22.76%	22.95%	30.96%	23.76%
Net income (loss) attributable to common shareholders	2,010,454	2,364,279	4,814,753	3,512,198
Net income (loss) attributable to common shareholders per share	0.0736	0.0866	0.1763	0.1286
			September 30, 2019 (RMB)	**December 31, 2018 (RMB)**
Total assets			192,391,745	142,071,065
Total liabilities			91,427,350	42,718,318
Shareholders' Equity			67,686,395	66,802,884
Non-controlling interest			33,278,000	32,549,863

- Revenues increased by 6.67% for the quarter compared to 2018. The operating margins have decreased by 8.20% for the quarter compared to 2018.
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- Debt to equity .91:1 (September 30, 2019), .43:1 (December 31, 2018), .36:1 (December 31, 2017)

Outlook

It is expected that the Chinese economy will struggle due to the tariffs and conflict with the USA in 2019. For the non-cooler side of the business, sales declined marginally as the company sells to customers that export to the USA. Our cooler market continues to expand with new product models and increasing export sales. The Group's performance for the remainder of 2019 is expected to benefit from these factors.

RESULTS OF OPERATIONS

Sales

2019		2018	
Quarter (RMB)	Year to date (RMB)	Quarter (RMB)	Year to date (RMB)
75,879,866	200,664,807	71,136,131	203,351,553

Revenues have increased by 4,743,735 RMB or 6.67 % for the quarter from 2018.

Gross Profit

	Quarter		Year to date	
	2019	2018	2019	2018
Gross Profit	17,271,935	22,023,542	46,057,117	48,321,659
% of Total Sales	22.76	30.96	22.95	23.76

Due to a less favorable exchange rates and an increased cost of goods.

Salaries

Salaries decreased to 13,688,612 RMB from 16,768,903 RMB (-18.37%) for the compared to 2018 due to lower director remuneration and sales commissions.

General Administration

General administrative expenses decreased to 25,884,940 RMB from 28,511,477 RMB (-9.21%) for the quarter compared to 2018.

Selling

Selling expenses decreased to 9,866,489 RMB from 11,985,305 RMB (-17.68%) for the quarter compared to 2018.

Interest on Debt

Interest has decreased for the quarter and for the current year due to the exchange loss due to a stronger RMB being less than in the same period in 2018.

Income Tax Expense

Income tax is incurred at the Chinese joint venture level at a rate of 25% of taxable earnings. The 25% rate has been reduced to 15% for the years 2016 – 2019. The expenses incurred outside China are not deductible and as such the tax expense is higher as a percentage of consolidated profits due to this non-deductibility.

Quarterly Information

Selected Quarterly Consolidated Financial Information

	Unaudited Quarters Ended			
	September 30, 2019 (RMB)	**June 30 2019 (RMB)**	**March 31, 2019 (RMB)**	**December 30, 2018 (RMB)**
Revenue	75,879,866	63,934,356	60,850,585	68,282,439
Net income (loss) attributable to common shareholders	2,010,454	593,356	(239,531)	(330,068)
Net income (loss) attributable to common shareholders per Share	0.0736	0.0217	(0.0088)	(0.0120)

	Unaudited Quarters Ended			
	September 30, 2018 (RMB)	**June 30 2018 (RMB)**	**March 31, 2018 (RMB)**	**December 30, 2017 (RMB)**
Revenue	71,136,131	68,754,878	63,460,544	71,148,050
Net income attributable to common shareholders	4,814,753	(1,118,810)	(37,435)	(8,431,692)
Net income attributable to common shareholders per Share	0.1763	(0.0410)	(0.0014)	(0.3087)

The Corporation's primary capital management objective is to maintain a strong statement of financial position through the optimization of the debt and equity balance affording the Corporation financial flexibility to achieve goals of continued growth and access to capital. The capital structure of the Company consists of shareholders' equity comprised of share capital and deficit.

The basis for the Corporation's capital structure is dependent on the Corporation's expected business growth and changes in the business environment. The Corporation manages its capital structure and makes adjustments according to market conditions to maintain flexibility while achieving the objective sated above. To manage the capital structure, The Corporation may adjust capital spending, issue new shares, issue new debt, or repay existing debt.

The Corporation is not exposed to externally imposed capital requirements.

Cash Flow:

	September 30, 2019 (RMB)	September 30, 2018 (RMB)
Cash provided by (used in) operating activities	19,660,781	15,118,905
Cash used in investing activities	(4,370,301)	(1,359,007)
Cash provided by (used in) financing activities	(1,727,319)	(4,889,841)

Contractual obligations, Commitments and Guarantees

a) Commitments

The Company is committed to payments under operating leases for premises and equipment as follows:

	(RMB)
Within one year	7,433,702
After one year but within five years	24,606,051
After five years	17,226,185

The Corporation has no capital commitments outstanding at September 30, 2019 as part of its Joint Venture (2018- nil).

<u>Off-Balance Sheet Arrangements</u>

The Company has no off balance sheet arrangements.

Share Capital

a) **Authorized**
Unlimited number of voting, common shares and non-voting, preferred shares.

b) **Issued**

	September 30, 2019		September 30, 2018	
	Common Shares (#)	Amount (RMB)	Common Shares (#)	Amount (RMB)
Balance – Beginning and end of period	27,309,927	52,242,949	27,309,927	52,242,949

Share Capital (continued)

c) **Stock option plan**

Under the Corporation's stock option plan, the aggregate number of common shares that may be reserved for issuance pursuant to options shall not exceed 10% of the outstanding common shares at the time of the granting of an option, less the aggregate number of common shares then reserved for issuance pursuant to any other share compensation arrangement. The exercise price per common share for option granted shall not be less than the market price. Every option shall have a term not exceeding and shall expire no later than five years after the date of grant. The options granted under this plan may not be assigned or transferred. The Board of Directors shall determine the manner in which an option shall vest and become exercisable.

On May 11th, 2017, the Company granted 2,730,000 stock options which vested immediately and are exercisable into one common share in exchange for CAD $0.35 per share for a period of five years. The options were valued using the Black Scholes option pricing model with the following inputs: volatility – 147.4%, risk-free interest rate – 0.91%, expected life – five years; and dividend yield – 0%. The company did not have any stock options outstanding, or stock option transactions during the current year.

As at December 31, 2018, there are 2,730,000 (2017 – 2,730,000) stock options outstanding and exercisable at a weighted average price of RMB1.82 (CAD - $0.35) per share and have a weighted average life remaining of 3.36 years.

Transactions with Related Parties

Details of transactions between the Pearl River group of companies and related parties are disclosed below:

a) During the period and in the normal course of business, the Company entered into the following transactions with Guangzhou Plastics Industrial Joint Stock Co. Limited, the PRC partner of the jointly controlled entity, Guangzhou Rodman Plastics:

	2019 (RMB)	**2018** (RMB)
Purchase of raw materials	6,751,446	12,770,316
Sale of finished goods	-	-
Trademark paid	58,018	36,000

b) During the period the Company had the following other transactions included in general and administrative expenses with related parties:

Administrative fees incurred with a company controlled by a director of the Company were incurred in the amount of 468,545 RMB during the period. Of this amount 43,515 RMB is included in accounts payable and accrued liabilities at September 30, 2019.

c) The remuneration paid of directors and other members of key management during the period was as follows:

	2019 (RMB)	2018 (RMB)
Management salary and benefits	568,364	496,229

Transactions with Related Parties (continued)

These transactions have been recorded in the financial statements at the exchange amount, which is the amount of consideration established and agreed to by the related parties. Management is of the opinion that these transactions were undertaken under the similar terms and conditions as those with non-related parties.

New Accounting standards and amendments

The Corporation adopted the following new accounting standards which did not have a material impact on these financial statements:

IFRS 16 Leases

IFRS 16 was issued in January 2016 and specifies how an IFRS reporter will recognize, measure, present and disclose leases.

IFRS 16 introduces a single lessee accounting model and requires a lessee to recognize assets and liabilities for all leases with a term of more than 12 months, unless the underlying asset is of low value. Specifically, under IFRS 16, a lessee is required to recognize a right-of-use asset representing its right to use the underlying leased asset and a lease liability representing its obligation to make lease payments. Accordingly, a lessee should recognize depreciation of the right-of-use asset and interest on the lease liability, and also classifies cash repayments of the lease liability into a principal portion and an interest portion and presents them in the statement of cash flows. Also, the right-of-use asset and the lease liability are initially measured on a present value basis. The measurement includes non-cancellable lease payments and also includes payments to be made in optional periods if the lessee is reasonably certain to exercise an option to extend the lease, or to exercise an option to terminate the lease.

In respect of the lessor accounting, under IFRS 16, a lessor continues to classify its leases as operating leases or finance leases, and to account for those two types of leases differently.

IFRS 16 primarily affects the Group's accounting as a lessee of leases for a number of properties which were previously classified as operating leases. The application of the new accounting model increases both assets and liabilities and impacts the timing of the expense recognition in the statement of profit or loss over the period of the lease.

IFRIC 23 "Uncertainty over Income Tax Treatments"

IFRIC 23 provides guidance on the accounting for current and deferred tax liabilities and assets in circumstances in which there is uncertainty over income tax treatments. IFRIC 23 is effective for annual periods beginning on or after January 1, 2019, with earlier adoption permitted.

Management is in the process of reviewing these new standards and its impact on the consolidated financial statements.

Financial Instruments and Other Instruments

Capital and financial risk management

The Group's objective of managing capital are to safeguard the Group's ability to continue as a going concern in order to provide returns for shareholders and benefits for other stakeholders and to maintain an optimal capital structure to reduce cost of capital.

In order to maintain or adjust the capital structure, the Group may adjust the amount of dividends paid to shareholders, return capital to shareholders, issue new shares or sell assets to reduce debts.

The capital structure of the Group consists of equity attributable to equity holders of the Company only, comprising share capital and reserves.

The main risks arising from the Group's financial instruments in the normal course of the Group's businesses are credit risk, interest rate risk, liquidity risk, and currency risk.

These risks are limited by the Group's financial management policies and practices described below.

a) Credit risk

The Group's credit risk is primarily attributable to cash, and trade and other receivables.

The carrying amounts of cash and trade and other receivables represent the Group's maximum exposure to credit risk in relation to its financial assets. The objective of the Group's measures to manage credit risk is to control potential exposure to recoverability problems.

For trade and other receivables, management has a credit policy in place and the exposures to these credit risks are monitored on an ongoing basis. Most of these balances are due from state-owned enterprises or major customers with good repayment history. There has been no material credit defaults in the past.

Trade receivables

The Group measures loss allowances for trade receivables at an amount equal to lifetime ECLs, which is calculated using a provision matrix. As the Group's historical credit loss experience indicates no significantly different loss patterns by customer segments, the grouping for trade receivables for the assessment of ECLs is by past due days, except one customer that was assessed as being credit-impaired and at risk of default.

Expected loss rates are based on actual loss experience over the past three years. These rates are adjusted to reflect differences between economic conditions during the period over which the historic data has been collected, current conditions and the Group's view of economic conditions over the expected lives of the receivables.

Expected credit losses for trade and other receivables are detailed in the respective notes to these consolidated financial statements.

Prior to January 1, 2018, an impairment loss was recognized only when there were indications that the debtors or a group of debtors were experiencing significant financial difficulty, default or delinquency in payments.

At the end of the reporting period, the Group has a concentration of credit risk as 29% (2017: 29%) of trade receivables was due from one (2017; one) customer.

b) Interest rate risk

The Group's interest rate risk arises primarily from bank borrowings. Borrowings issued at variable rates and at fixed rates expose the Group to cash flow interest rate risk and fair value interest risk respectively.

The Group's fair value interest rate risk mainly arises from bank borrowings which interest rates and terms of repayment are disclosed in Notes to the annual financial statements. Borrowings were issued at fixed rates which expose the Group to fair value interest rate risk. The Group has no cash flow interest rate risk as there are no bank borrowings which bear floating interest rates. The Group has not used any financial instruments to hedge potential fluctuations in interest rates.

c) Liquidity risk

The Group's policy is to regularly monitor current and expected liquidity requirements to ensure that it maintains sufficient reserves of cash to meet its liquidity requirements in the short and longer term.

d) Currency risk

The Group is exposed to currency risk primarily through transactions that are denominated in a currency other than the functional currency of the operations to which they relate. The majority of the operations and customers of the Group's subsidiaries are located in the PRC with most of the operating assets and transactions denominated and settled in Renminbi, which is the functional currency of the majority of the Group's subsidiaries. The entity does not have significant financial assets and liabilities or transactions denominated in currencies that are not the functional currency of the entity's to which they relate. As a result, the Group does not have significant exposure to risk resulting from changes in foreign currency exchange rates

e) Price risk

The Group is not exposed to any equity securities risk or commodity price risk.

Fair value of financial instruments

All financial instruments are carried at amounts not materially different from their fair values as at September 30, 2019 and December 31, 2018.

Critical accounting judgments and key sources of estimation uncertainty

In the application of the Group's accounting policies, the directors are required to make judgments, estimates and assumptions about the carrying amounts of assets and liabilities that are not readily apparent from other sources. The estimates and associated assumptions are based on historical experience and other factors that are considered to be relevant. Actual results differ from these estimates.

The estimates and underlying assumptions are reviewed on an ongoing basis. Revisions to accounting estimates are recognized in the period in which the estimate is revised if the revision affects only that period, or in the period of the revision and future periods if the revision affects both current and future periods.

In the process of applying the Group's accounting policies, management has made the following judgments apart from those involving estimation as discussed below, which have the most significant effect on the amounts recognized in the financial statements.
In determining whether an asset is impaired or the event previously causing the impairment no longer exists, the Group has to exercise judgment in the area of asset impairment, particularly in assessing: (1) whether an event has occurred that may affect the asset value or such event affecting the asset value has not been in existence; (2) whether the carrying value of an asset can be supported by net present value of future cash flows which are estimated based upon the continued use of the asset or de-recognition; and (3) the appropriate key assumptions to be applied in preparing cash flow projections including whether these cash flow projections are discounted using an appropriate rate. Changing the assumptions selected by management to determine the level of impairment, including the discount rates or the growth rate assumptions in the cash flow projections, could materially affect the net present value used in the impairment test.

Critical accounting judgments and key sources of estimation uncertainty (continued)

Key sources of estimation uncertainty

The key assumptions concerning the future and other key sources of estimation uncertainty at the end of each reporting period, that have a significant risk of causing a material adjustment to the carrying amounts of the Group's assets and liabilities within the next financial year are discussed below.

Provision against slow-moving inventories

Provision for slow-moving inventories is made based on the ageing and estimated net realizable value of inventories. The assessment of the provision amount required involves management judgment and estimates. Where the actual outcome or expectation in future is different from the original estimate, such differences will impact the carrying value of inventories and provision charged/written back in the period in which the estimate has been changed.

Provision for doubtful debts

Provision for doubtful debts is made based on assessment of the recoverability of trade debtors and other receivables. The identification of doubtful debts requires management judgment and estimates. Where the actual outcome or expectation in future is different from the original estimate, such differences will impact the carrying value of trade debtors and other receivables and doubtful debt expenses/written back in the period in which the estimate has been changed.

Income taxes

The Company is subject to income taxes in Canada and in certain of its foreign operations. Management has estimated the income tax provision and deferred income tax balances in accordance with its interpretation of the various income tax laws and regulations. It is possible, due to complexity inherent in estimating income taxes that the tax provision and deferred income tax balances could change.

Estimated useful lives

Management estimates the useful lives of property, plant and equipment and amortizing intangible assets based on the period during which the assets are available for use. The amounts and timing of depreciation and amortization for these amounts are affected by the useful lives. The estimates are reviewed annually and are updated for changes in the expected useful life.

Business Development

Pearl continues to expand its business activities by increasing its distribution network throughout the new economic development areas in China; by developing new products for the logistics / automotive and agriculture industries; developing new products in conjunction with its export OEM customers and continuing to increase business activity from non-plastic sourcing opportunities.

Risks and Uncertainties

Pearl operates in the Chinese market which involves various known and unknown risk factors and uncertainties and other factors affecting Pearl specifically or the markets generally, Pearl's future performance could be affected by these important factors, which in some cases have affected, and which in the future could affect, Pearl's actual results and that could cause Pearl's actual results for 2019 and beyond to differ materially from those expressed in any forward looking statements made by or on behalf of Pearl. These risks and uncertainties include fluctuations in the level of local demand and capital, changes in Pearl's product costs and pricing, an inability to achieve or delays in achieving sayings related to the cost reductions, consolidation and restructuring program, changes in Pearl's product mix, the growth rate of the markets in which Pearl products are sold, market acceptance and demand for Pearl's products, changes in availability or prices for raw materials, pricing competition, difficulty in developing and introducing new products, failure to penetrate new markets effectively, limitations on foreign investment in local business and other political, economic and regulatory risks, difficulty in preserving proprietary technology, changes in environmental regulation and currency risk exposure. Certain of these risks and uncertainties are described in more detail below.

The price and availability of raw materials represents a substantial portion of the cost of manufacturing Pearl products. Historically, there have been fluctuations in these raw materials' prices and in some instances price movements have been volatile and affected by circumstances beyond Pearl's control. There can be no assurance that Pearl can pass on increase from normal market fluctuations in the price of resin to its customers through increases in selling price, or otherwise absorb such cost increases without significantly affecting its margins. In addition, the industry has occasionally found certain raw materials to be in short supply.