# ADVISORY REPORT ON VALUATION OF LIME KILN UNDERTAKING IN GUJARAT & ODISHA OF JK ENVIRO-TECH LIMITED

**15TH JULY 2013**

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## Chapter 1: Scope of Work and Limitation

This Advisory Report ("Report") is being furnished on the request of the management of JK Paper Limited ("JKPL"). JK Enviro-Tech Limited ("JKETL") is planning to sell its Lime Kiln Undertaking ("Undertaking") in Gujarat & Odisha including all its assets & liabilities to JKPL through slump sale as on April 1, 2013 (hereinafter referred to as "Transfer Date") through a Scheme of Arrangement. Therefore, the management of JKPL has appointed S.S. Kothari Mehta & Company ("SSKM"), Chartered Accountants, to advise them on an appropriate transaction price, i.e. the value of Lime Kiln Undertaking of JKETL. For the purpose of this Report, JKETL & JKPL are hereinafter collectively referred to as Companies.

Therefore, the purpose of this Report is to advise JKPL on an appropriate transaction price, i.e. the value of the Undertaking as on the Transfer Date.

**Limitation**

It may be noted that valuation is a highly subjective exercise and the opinion on valuation may differ from valuer to valuer depending on the individual perception of the attendant circumstances. At best, it is an expression of opinion or a recommendation based on certain assumptions.

As specified by the ICAI Technical Guide on Valuation (Page 64), we are to state that:-

a) Valuation does not include the Auditing of Financial Data provided by management, and therefore we do not take any responsibility for its accuracy and completeness.
b) Valuation should not be considered as an opinion on the achievability of Financial Projections either mentioned in, or relied upon for this Report.
c) This Valuation Advisory is to be considered only and only for the purpose of the valuation of Lime Kiln Undertaking of JKETL.
d) Our liability is only to the Board of Directors of the Companies which are parties to the transaction.

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## Chapter 2: Disclaimer Clause & Preface

The Report has been prepared by SSKM from information extracted from desk research, published reports and other data supplied by the management of the Companies and other sources believed to be reliable and true. Our scope of work does not include verification of data submitted by management and we have relied upon the data so submitted. We have prima facie analysed the data and formed our views. The Report cannot be distributed, published, reproduced or used, without the prior express written consent of SSKM, for any purpose except for the reason stated in Chapter 1.

The management of JKETL and JKPL have provided the factual data, business details, market research report, and projected financial statements on which SSKM has relied. While the information provided herein is believed to be true and reliable to the best of our knowledge, we do not make any representations or warranties, express or implied, as to the accuracy or completeness of such information.

In furnishing the Report, SSKM reserves the right to amend or replace the Report at any time. The information contained herein is based on certain assumptions and management's analysis of information available at the time the Report was prepared. SSKM does not purport to give any representation, warranty or other assurance in relation to this Report.

The Report highlights the alternative approaches to valuation, identifies various factors affecting the valuation, summarizes the methodology keeping in view the circumstances of JKETL and arrives at the value of Lime Kiln Undertaking of JKETL.

The purpose of this Report is to advise JKPL on an appropriate transaction price, i.e. the value of Lime Kiln Undertaking of JKETL as on the Transfer Date; and values derived in this Report cannot be used for any other purpose. This report is not valid for any other purpose. Further, it may be noted that we are not giving any opinion, express or implied, on the amount of consideration payable by JKPL to JKETL to acquire Lime Kiln Undertaking. Our scope of work is limited to the extent of valuing the Lime Kiln Undertaking. It is discretionary to the Management of JKPL to decide upon the consideration payable to JKETL on acquiring the said Undertaking.

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## Chapter 3: Data Relied Upon

For the purpose of this Report, the documents and/or Information published or provided by management have been relied upon. We have not carried out any further verification of the same; but have carried out a prima facie review & formed our views regarding the projections. We also do not vouch for the accuracy of the forecast as is provided to us by the management of the Companies or assume the achievement thereof.

We have relied upon Management Representation Letter dated July 4th, 2013 wherein JKETL provided the following information to SSKM:

- Audited annual reports of JKETL & JKPL for the financial years 2009-10, 2010-11, 2011-12 and 2012-13.
- Financial projections of five financial years from 2013-14 to 2017-18 of JKETL, duly certified by a Director
- Shareholding Pattern of JKPL as on March 31st, 2013.
- Shareholding Pattern of JKETL as on March 1st, 2013, June 30th, 2013 and July 18th, 2013.
- Memorandum & Articles of Association of JKETL & JKPL.
- Note on the operations of JKETL
- Flow of activities between JKPL & JKETL
- Certified copies of Resolution of Board of Directors of JKETL and JKPL to explore options of consolidation of the operations of JK Enviro-tech Limited with the JK Paper Limited.
- Statement of Unabsorbed Business Losses/ Depreciation
- Details of Contingent Liabilities of the Company and;
- Details of Term Loans and Bank Limits, including amount of loan availed, amount outstanding, terms & conditions in brief, interest rate, security/guarantee.
- Reports by SR Jain & Associates on valuation of fixed assets of the Lime Kiln Undertaking in Odisha & Gujarat.

**Wherever required, all the accounts, projections and schedules listed above have been certified by the management of the respective companies.**

We have also relied upon verbal explanations and information given to us by the management of these companies during the course of our exercise.

Some of the data required for the purpose of this exercise has been taken from Prowess Software (CMIE), Bombay Stock Exchange's website (www.bseindia.com) & National Stock Exchange's website (www.nseindia.com).



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# Chapter 4: Background of Companies

## 4.1 JK Paper Limited ("JKPL")

JKPL is a leading paper manufacturer in India with a combined production capacity of 2,90,000 Tonnes per annum.

It operates two integrated Pulp and Paper Mills in India:

- JK Paper Mills in Rayagada (Odisha), in eastern India and
- Central Pulp Mills in Songadh (Gujarat), in western India

### 4.1.1 Capital Structure

JKPL is a public limited company and has a paid up capital of Rs. 136.62 crores divided into 13,66,20,625 equity shares of Rs. 10/- each. The capital structure of the company as on 31st March, 2013 is as follows:

**Table- "JKPL Capital Structure"**

*Rs. in Crores*

| Particular | Amount |
|---|---|
| **Authorised Share Capital** | |
| 20,00,00,000 Equity Shares of Rs.10/- each | 200.00 |
| 3,00,00,000 Redeemable Preference Shares of Rs.100/- each | 300.00 |
| **Issued, Subscribed & Paid up** | |
| 13,66,20,625 equity shares of Rs.10/- each | 136.62 |

*(Source: Information from Annual Report)*

JKPL is listed on National Stock exchange and Bombay Stock Exchange.

### 4.1.2 Shareholding pattern as on 31st March, 2013 is as follows:-

**Table- "JKPL: Shareholding Pattern"**

| Shareholders | No. of shares | % holding |
|---|---|---|
| Promoters & Promoter Group | 7,07,01,173 | 51.75% |
| Institutional Holding | 1,50,14,607 | 10.99% |
| Non-Institutional Holding | 5,09,04,845 | 37.26% |
| **TOTAL** | **13,66,20,625** | **100.00%** |

*(Source: bseindia.com)*

[redacted]

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## 4.2 JK Enviro-Tech Limited ("JKETL")

**Background:**

JKETL was incorporated in 2008, with the objective of processing lime sludge (a waste) of JKPL. It is substantially owned by JKPL, i.e. JKPL holds 82.82% stake in JKETL as on June 30th, 2013. JKPL having plants in Gujarat & Odisha, manufactures paper and thus as a result generates a waste, i.e. lime sludge during the production process. As per the CREP (Corporate Responsibility for Environmental Protection) Guidelines introduced by The Ministry of Environment & Forests on Environmental Issues in 2003, it has become obligatory on the part of large integrated pulp and paper mill to install lime mud re-burning kiln to avoid any solid waste discharge to reduce load on the environment due to lime sludge disposal.

As a result, JKPL has set up an SPV, JKETL for carrying out the above process at both the Units i.e. JK Paper Mills & Central Pulp Mills. Thus, JKETL carries on the operations of removing the sludge from Paper Mills and use the sludge so removed in the manufacturing & extraction of lime from it. The extracted lime is sold to JKPL. It helps JKPL to get continuous supply of lime apart from complying with environment norms. JKETL, therefore, is not involved in any other business and all extracted lime is sold to JKPL, & hence, its only customer is JKPL.

Unlike the unorganized players, JKETL have to use environmental protection measure as they have to comply with CREP requirements. Therefore, in order to continue complying with CREP requirements, JKPL is acquiring the Lime Kiln Undertaking in Gujarat & Odisha through slump sale through a Scheme of Arrangement.

### 4.2.1 Capital Structure

JKETL is an unlisted company and has a paid up capital of Rs. 4.95 crore divided into 49,50,600 equity shares of Rs. 10/- each. The capital structure of the company as on 31st March, 2013 is as follows:

**Table- "JKTEL Capital Structure"**

*Rs. In crores*

| Authorised Share Capital | Amount |
|---|---|
| 1,00,00,000 equity shares of Rs.10/- each | 10.00 |
| 5,00,000 preference shares of Rs.100/- each | 5.00 |
| **Issued Subscribed & Paid up** | **Amount** |
| 49,50,600 equity shares of Rs.10/- each | 4.95 |

4.2.2 Shareholding Pattern

**Table- "JKETL Shareholding Pattern as on 31.03.2013"**

| Name of the Shareholder | No. of Shares | % Holding |
|---|---|---|
| JK Paper Limited | 1700000 | 34.34% |
| Others | 2350600 | 65.66% |
| **Total** | **4950600** | **100.00%** |

However, JKPL further acquired shares of JKETL, thereby holding 82.82% shares of JKETL as on 30th June 2013 as shown below:

**Table- "JKETL Shareholding Pattern as on 30.06.2013"**

| Name of the Shareholder | No. of Shares | % Holding |
|---|---|---|
| JK Paper Limited | 4100000 | 82.82% |
| Others | 850600 | 17.18% |
| **Total** | **4950600** | **100.00%** |

4.2.3 Financials:-

**Table- "Balance Sheet of JKETL as on"** *(Rs. In crores)*

| Particulars | 31-Mar-11 Audited | 31-Mar-12 Audited | 31-Mar-13 Audited |
|---|---|---|---|
| **Equity & Liabilities:** | | | |
| Shareholders' Funds | 6.28 | 7.48 | 7.75 |
| Non-Current Liabilities | 47.04 | 39.39 | 27.06 |
| Current Liabilities | 19.15 | 24.11 | 29.19 |
| **Total** | **72.47** | **70.98** | **64.00** |
| **Assets** | | | |
| Non-Current Assets | 69.37 | 65.23 | 58.12 |
| Current Assets | 3.1 | 5.75 | 5.88 |
| **Total** | **72.47** | **70.98** | **64.00** |

**Table- "Profit & Loss of JKETL for the period ending"** *(Rs. In crores)*

| Particulars | 31-Mar-11 Audited | 31-Mar-12 Audited | 31-Mar-13 Audited |
|---|---|---|---|
| Total Income | 37.72 | 30.49 | 36.95 |
| Total Operating Expenditure | 24.71 | 17.04 | 27.94 |
| **PBIDTA** | 13.01 | 13.45 | 9.01 |
| Depreciation | 3.59 | 3.79 | 3.66 |
| Interest | 5.78 | 5.48 | 4.66 |
| **PBT (before exceptional items)** | 3.65 | 4.19 | 0.69 |
| Exceptional items | - | - | - |
| **PBT** | 3.65 | 4.19 | 0.69 |
| Tax | 1.86 | 2.12 | 0.41 |
| **PAT** | 1.79 | 2.06 | 0.28 |



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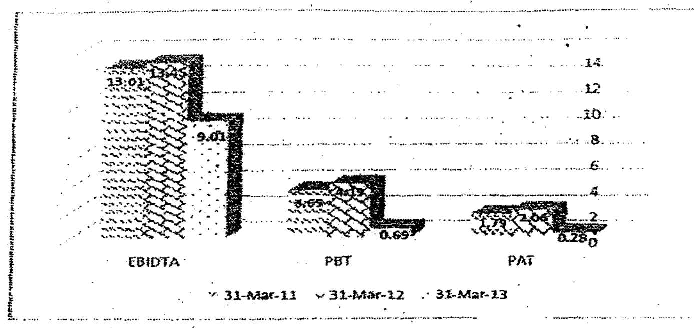


**Table- "Ratio Analysis of JKETL":**

| Ratios | FY 2011 | FY 2012 | FY 2013 |
|---|---|---|---|
| EBDITA Margin | 34.49% | 44.12% | 24.38% |
| PAT Margin | 4.75% | 6.76% | 0.76% |
| Interest Coverage Ratio | 1.63 | 1.77 | 1.15 |
| Return on Capital Employed | 14.20% | 16.09% | 12.10% |
| Return on Net-worth | 28.50% | 27.54% | 3.61% |

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## Chapter 5: Objective and Rationale of Valuation

### 5.1 Objective of this report:

JKPL intends to acquire the Lime Kiln Undertaking of JKETL including all its assets & liabilities through Slump sale through a Scheme of Arrangement. Thus objective of the valuation is to advise on an appropriate transaction price, i.e. the value of the Lime Kiln Undertaking of JKETL as on the Transfer Date and therefore, the Management of JKPL has appointed SSKM to do the abovementioned valuation.

### 5.2 Rationale of Slump sale:

a) JKPL has commercially agreed upon acquiring Lime Kiln Undertaking of JKETL as a going concern with all its assets & liabilities, through Slump Sale through a Scheme of Arrangement.

b) Operational Efficiency:

Consolidation of the lime kiln undertaking of JKETL with JKPL will help JKPL increase its operational efficiency.

c) Adequate manpower & other resources:

Management of JKPL is of the opinion that due to effective manpower & other resources of JKPL, they will be able to manage the consolidated entity in an effective & efficient manner. Consolidation will also allow them to control the processing of lime sludge according to their requirements.

d) The acquisition of these plants will enable JKPL to continue complying with the CREP requirements.

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## Chapter 6: Valuation Methodology

The valuation methodology to be adopted varies from case to case depending upon different factors affecting valuation. The basis of valuation would depend on the purpose of valuation, nature of business, future prospects of the company & industry and other attendant circumstances.

Different methodologies are adopted for valuation of manufacturing, investment, property and trading companies. Investment and property companies are valued based on the market value or fair value of their underlying assets while manufacturing companies are valued in relation to profits from business and relative value of assets. Different methodologies used for the purpose of valuation are explained subsequently:

### 6.1 ASSET APPROACH:

**This methodology is likely to be appropriate for a business whose value derives mainly from the underlying value of its assets rather than its earnings, such as property holding and investment business. This method may also be appropriate for a business that is not making an adequate return on assets and for which a greater value can be realized by liquidating the business and selling its assets.** This methodology can also assume the amount which can be realized by liquidating the business by selling off all the tangible assets of a company and paying off the liabilities. This methodology is appropriate for property holding and investment companies.

Net asset values, which are of great relevance in industries such as utilities, manufacturing and transport that are dependent on physical infrastructure and assets, may not have particular significance in industries such as information technology, pharmaceutical that are driven by intangibles not recorded in the books. The asset valuation is a good indicator of the entry barrier that exists in a business.

Some of the most common techniques of valuation considered under this approach are to value a business enterprise on the basis of book value of the assets or at Adjusted book value of the assets or at Replacement value.

i. **Book value:** This is simply a value based upon the accounting books of the business. In simple term, Assets less liabilities equals the owners' equity, which is the "Book Value" of the business. For mature firms with predominantly fixed assets, little or no growth opportunities and no potential for excess returns, the book value of the assets may yield a reasonable measure of the true value of these firms. For firms with significant growth opportunities in businesses where they can generate excess returns, book values will be very different from true value.

ii. **Adjusted book value:** This method involves reviewing each and every assets and liabilities on the company's balance sheet and adjusting it to reflect its estimated market value. Depending on the mix of assets owned by the company, other types of appraisers (e.g., real estate, machinery and equipment) might need to be consulted as part of the valuation process. In addition, it is important to consider intangible items that might not necessarily be reflected on the balance sheet, but which might have considerable value to a user, such as trade names, patents, etc. The unrecorded and contingent liabilities are also considered at their fairly estimated value.

iii. **Replacement value:** This method is mainly used with asset-heavy businesses such as hotels/motels and natural resources (mining) businesses. The asset valuation methodology essentially estimates the cost of replacing the tangible assets of the business. The replacement cost takes into account the market value of various assets or the expenditure required to create the infrastructure exactly similar to that of a company being valued. Since the replacement methodology assumes the value of business as if a new business is set, this methodology may not be relevant in a going concern.

## 6.2 INCOME APPROACH

The Income Approach derives an estimation of value based on the sum of the present value of expected economic benefits associated with the asset or business (Economic benefits have two components: cash flow (or dividends) and capital appreciation). Under the Income Approach, the appraiser may select a single period capitalization method (Profit earning capacity value method) or a multi-period discounted future income method.

a) **Profit earning capacity value method:**

- The basic of this approach is to find the normalized earning capacity of the business and to capitalize it on the basis of appropriate rate considering the business fundamentals of safety, return and time. In this method, Earning before Interest, Depreciation and Tax ("EBIDTA") is considered of comparable businesses. Alternately, an appropriate multiple can be used with the normalized earnings to arrive at fair estimation of business value ("Enterprise Value" of "EV").
- The important task is to determine two factors (1) normalized earnings (EBIDTA) and (2) rate of capitalization or multiple for capitalization
- The average annual maintainable earnings should be representative and is generally determined based on average past earnings, or future projected earnings where the past earnings are not representative of the future earning potential of the business.

Generally, when future projections of more than one financial year are used, present value of the future profits is calculated based on an appropriate discounting rate.

- The capitalization rate is taken based at EV/EBIDTA Multiple of the industry on the rate of return expected by the equity shareholders of the company.

b) **Discounted Free Cash Flow Method (DCF)**

- The Discounted Cash Flow (DCF) methodology expresses the present value of a business as a function of its future cash earnings capacity. This methodology works on the premise that the value of a business is measured in terms of future cash flow streams, discounted to the present time at an appropriate discount rate. It recognizes that money has a time value by discounting future cash flows at an appropriate discount factor.
- **This method is used to determine the present value of a business on a going concern assumption.** The DCF methodology depends on the projection of the future cash flows and the selection of an appropriate discount factor.
- When valuing a business on a DCF basis, the objective is to determine a net present value of the cash flows ("CF") arising from the business over a future select period of time (say 5 years), which period is called the explicit forecast period. Free cash flows are defined to include all inflows and outflows associated with the project prior to debt service, such as taxes, amount invested in working capital and capital expenditure. Under the DCF methodology, value must be placed both on the explicit cash flows as stated above, and the ongoing cash flows a company will generate after the explicit forecast period. The latter value, also known as terminal value, is also to be estimated.
- The future cash flows can be projected, the less sensitive the valuation is to inaccuracies in the assumed terminal value. Therefore, the longer the period covered by the projection, the less reliable the projections are likely to be. For this reason, the approach is used to value businesses, where the future cash flows can be projected with a reasonable degree of reliability. For example, in a fast changing market like telecom or even automobile, the explicit period typically cannot be more than at least 5 years. Any projection beyond that would be mostly speculation.
- The discount rate applied to estimate the present value of explicit forecast period free cash flows as also continuing value, is taken at the "Weighted Average Cost of Capital" (WACC). One of the advantages of the DCF approach is that it permits the various elements that make up the discount factor to be considered separately, and thus, the effect of the variations in the assumptions can be modelled more easily. The principal

elements of WACC are cost of equity (which is the desired rate of return for an equity investor given the risk profile of the company and associated cash flows), the post-tax cost of debt and the target capital structure of the company (a function of debt to equity ratio). In turn, cost of equity is derived, on the basis of capital asset pricing model (CAPM), as a function of risk-free rate, Beta (an estimate of risk profile of the company relative to equity market) and equity risk premium assigned to the subject equity market.

- Value obtained by using DCF method gives us the Enterprise Value; and adjustment for the loans as on the valuation date gives us the Equity Value.

**This method is generally used when there is reasonable certainty on the timing, quantum and quality of the cash flows, which has its close coupling with the underlying assets (e.g. in case of a manufacturing company). It is the most commonly used valuation technique, and is widely accepted by valuers because of its intrinsic merits, some of which are given below:**

(a) It is a very sound model because it is based up on expected future cash flows of a company that will determine an investor's actual return.

(b) It is based on the expectations of performance specific to the business, and is not influenced by short-term market conditions or non-economic indicators.

(c) It is not as vulnerable to accounting conventions like depreciation, inventory valuation in comparison with the other techniques/approaches since it is based on cash flows rather than accounting profits.

## 6.3 THE MARKET APPROACH (RELATIVE VALUATION APPROACH):

Market value is also known as extrinsic value. The basis of market value is the assumption that if comparable Asset (or property) has fetched a certain price, then the subject asset (or property) will realize a price something near to it. There is a significant philosophical difference between discounted cash flow and relative valuation. In discounted cash flow valuation, we are attempting to estimate the intrinsic value of an asset based upon its capacity to generate cash flows in the future. In relative valuation, we are making a judgment on how much an asset is worth by looking at what the market is paying for similar assets. If the market is correct, on average, in the way it prices assets, discounted cash flow and relative valuations may converge. If, however, the market is systematically over pricing or under-pricing a group of assets or an entire sector, discounted cash flow valuations can deviate from relative valuations.



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This method involves reviewing transactions for companies that are in the same or similar line of business as the company being valued and then applying the relevant pricing multiples to the subject company to determine its value. The method might involve private company transactions, public company transactions, as well as public company valuation measures using current share market data. The theory behind this approach is that valuation measures of similar companies that have been sold in arms-length transactions should represent a good proxy for the specific company being valued. Depending on the source of data available and the underlying company being valued, a variety of valuation measures might be used including Enterprise Value (EV) to Sales, EV to EBITDA, EV to EBIT, Price to Earnings, etc. Adjustments are commonly made to these valuation measures before applying to the subject company to ensure an "apples-to-apples" comparison. One or many comparable sales might be considered under this method depending on the data available and the degree of similarity to the company being valued.

**Commonly used Multiples are:**

Business can be valued based on the multiples like

- Earning multiples- (PAT, EBITDA, EBIT etc)
- Book value (or replacement value) multiple
- Revenue Multiples
- Business specific Multiple

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## Chapter 7-Methodology adopted for Valuation of the Lime Kiln Undertaking of JKETL

**7.1 Methods adopted for valuation:**

The valuation of Lime Kiln Undertaking of JKETL has been done on the basis of Weighted Average of DCF & Adjusted NAV with weightage assigned as per Para 7.3 of this report.

Relative Valuation method has not been used as JKETL is not a listed company.

We emphasize that the choice of method in valuation is significantly governed by the purpose for which valuation is required. This is actually a Slump Sale transaction being executed through a Scheme of Arrangement; & it is not for the purpose of determining a Share Exchange ratio. Hence, we consider it appropriate to consider the Valuation Report of S.R. Jain & Associate, a reputed valuer, for valuing Lime Kiln Undertaking using Replacement Value Method while calculating the Adjusted NAV. Also, we consider it appropriate to take a weighted average of Adjusted NAV & DCF value.

**7.2 DCF & Adjusted NAV Methods:**

**7.2.1 <u>DCF Method:-</u>**

Based on the assumptions and business plans provided by the management, the Lime Kiln Undertaking of JKETL is valued on **Discounted Cash flow (DCF) basis** as given below:

**i.** <u>Free Cash Flow</u>

**Explicit Period**: FY 2014 to FY 2018 (5 years).

**ii.** <u>Period considered for projections</u>

We have considered a period of 5 operating years starting from FY 2014 for the purpose of valuation so as to cover a business cycle.

It is substantiated from the quotation from *Page 7 & 8 of "Technical guide on Share Valuation, by The Institute of Chartered Accountants of India, Published in Year 2009)*

*"Cash flow should reasonably capture the growth prospects and earnings capability of a company. The forecasted period should necessarily cover the entire business cycle of a company"*

Moreover, the longer the period covered by the projection, the less reliable the projections are likely to be. For this reason, the approach is used to value businesses, where the future



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cash flows can be projected with a reasonable degree of reliability. For example, in a fast changing market like automobile or manufacturing, the explicit period typically cannot be more than 5 years.

**iii.** Discounting Factor

In determining the present value of the cash flows that are available to firm, the discount rate used is Cost of Capital of the entity, i.e. Weighted Average Cost of Capital (WACC). This reflects the opportunity cost of the Company.

*WACC is arrived at by using the following formula:*

*= (Cost of Equity * Shareholders Funds/ Total Funds) + (Cost of Debt * Debt/ Total Funds)*

***a. Cost of Equity***

The cost of equity has been determined by using Capital Asset Pricing model (CAPM). This has been computed as follows:

*Cost of equity = Rf + [Rm – Rf] (Beta)*

Where; Rf denotes risk free rate of return

Rm denotes return on diversified market portfolio

Rm-Rf is the market premium risk

Beta is the systematic risk factor

Following are the factors used for the calculation of cost of equity:

- Risk Free Return (Rf) is considered at **7.99%** which is based on 10 years zero coupon Indian Government bond yield as per the *latest available "Public Debt Management Quarterly Report" for the quarter: January-March, 2013, issued in the month of May, 2013.*

- Beta is used to calculate the cost of equity (i.e. expected rate of return by the equity shareholders). It is assumed that for shareholders the substitute opportunity for investment would be investment in SENSEX. Hence, we have assumed the shareholders' expectation equal to the market return (based on the return on BSE from 1979 till date).

  In order to calculate the cost of equity, we have considered the Beta = 1.00.

  The reason behind taking 1 as beta value is that the company, JKETL, has a very minimal risk since the operations of the company are limited to procuring lime sludge from JKPL and selling the extracted lime back to JKPL. Therefore, the company as such has no operational risks, no market risk, no competitor risk and no sector risks.

Moreover, as we know that the betas measure the risk of a firm relative to the market, thus, the more sensitive a business is to overall economic conditions, the higher is its beta.

Further, beta of a manufacturing firm is also effected by degree to which a product's purchase is discretionary. However, in the case of JKETL, the purchase of lime by JKPL is mandatory in order to comply with the CREP guidelines, hence, beta value is 1.

- Market Return (Rm) is considered **16.65%** which has been the market rate of return on Bombay Stock Exchange from April 1, 1979 to March 31st, 2013. ***(Source: BSE Website)***

**Based on the above, cost of equity (ke) comes out to be 16.65%.**

*b.* ***Cost of Debt***

The cost of debt has been computed considering the Current Interest rate at 12.25% and an effective tax rate of 32.45% has been taken. **Based on these assumptions, effective cost of debt works out to 8.27%.**

*c.* ***Cost of Capital***

The cost of capital has been worked out taking the initial Debt- Equity ratio at **2.20 : 1.** At this Debt-Equity ratio, the Cost of capital has worked out to be **10.89%.**

**Therefore, on the basis of abovementioned factors, the valuation of the Lime Kiln Undertaking as per DCF Method is Rs. 0.70 crores.**

### 7.2.2 Adjusted NAV Method:-

Adjusted NAV involves review of Assets & Liabilities of the Company and adjusting it to reflect replacement value or fair value. Hence, we have considered Adjusted NAV for the purposes of our Report.

The Net Asset Value of the Lime Kiln Undertaking is Rs. 7.49 crores.

However, the Management have got a valuation done by SR Jain & Associates, a reputed valuer, who has valued the Lime Kiln Undertaking based on the Replacement Value Method. The replacement Value is significantly lower than the Book Value & hence, the same is adopted by us in our Report.

**As a result, the Adjusted NAV of the Lime Kiln Undertaking of JKETL is Rs. 3.38 crores.**

**7.3 Weightages Assigned to the Valuation Methods Adopted:**

While valuing Lime Kiln Undertaking at Gujarat and Odisha having manufacturing facilities, we have assigned weights 2:1 to DCF and Adjusted NAV methods of valuation for valuing the operating business:

As per ***"The valuation of company shares and business"*** by Adamson & Adamson, 6th Edition published in 1980 in McCathie's case, it was decided as under:

*"A purchaser of shares in a company which is a going concern does not usually purchase them with a view to attempting to wind up the company..... The real value of the share will depend more on the profits which the company has been making and should be capable of making, having regard to its nature of business....." (Page 60)*

**Judicial Pronouncements and Eminent Authors' Views**

Though there are no thumb rules of valuation, there are a few pointers/basis to valuation principles that may be applicable on a case depending upon the attendant circumstances relative to each case.

The erstwhile Controller of Capital Issue (C.C.I.) advocated the above methodology. There are a few major Court decisions, which throw light on the adoptable basis of valuation.

In India, the valuers generally follow the principle laid down by the Hon'ble Supreme Court of India in the landmark case of merger of *Tata Oil Mills Co. Ltd. with Hindustan Levers Limited (Hindustan Lever Employees' Union vs. Hindustan Lever Limited and others (1995) 83 Comp. Cases 30 (SC))*. It suggests that *multiple methodologies are to be considered with stronger weightage to Free Cash Flow based methods*. The Court noted, *"in the case of amalgamation, a combination of all or some of the methods of valuation may be adopted for the purpose of fixation of the exchange ratio of all the entities"*. It is to be noted that even in such a situation, the book value method has been described as *"more of talking point than a matter of substance"*. Hence we are giving lower weight to Asset Value.

These approaches give a better picture of the value of the firm as they provide the value of the business on the basis of either the earning capacity of the business concerned (Income Approach) or on the basis of the value that a comparable asset (or property) has fetched in the market(Market approach) or as a composite basis.

In case of manufacturing / operating Company (as in this case), it is always preferable to do the valuation of such a company on a going concern basis.

S. S. KOTHARI MEHTA & CO. NEW DELHI CHARTERED ACCOUNTANTS

## Chapter 8: Valuation of Lime Kiln Undertaking of JKETL

Based on the valuation elucidated in the previous chapters, the valuation of Lime Kiln Undertaking of JKETL as on 1st April, 2013, i.e. the Transfer Date is as follows:

**Table- "Valuation of Lime Kiln Undertaking of JKETL" (using weighted average)**

| Particulars | Amount (in Rs. Crore) | Weight | Amount (in Rs. Crore) |
|---|---|---|---|
| Equity Value of Lime Kiln Undertaking using DCF Method of JKETL | 0.70 | 2 | 1.40 |
| Equity Value of Lime Kiln Undertaking using Adjusted NAV Method of JKETL | 3.38 | 1 | 3.38 |
| *Total* | | *3* | *4.78* |
| **Equity Value of Lime Kiln Undertaking of JKETL** | | | **1.59** |

**We opine that the value of the Lime Kiln Undertaking on a slump sale basis (after considering takeover of all assets and all liabilities) of JKETL is Rs. 1.59 Cr using Adjusted Net Asset Value & Discounted Cash Flow methods of valuation.**

**The report is to be read in whole.**

**For S.S. Kothari Mehta & Co.**

**Chartered Accountants**

S. S. KOTHARI MEHTA & CO. ★ NEW DELHI ★ CHARTERED ACCOUNTANTS

**Date: July 15, 2013**
**Place: New Delhi**

**K S Mehta**
**Partner**
**Membership Number: 008883**

**Firm No:**

## GLOSSARY

Following abbreviations are used in the report:

1) JKPL- JK Paper Limited
2) JKETL- JK Enviro-Tech Limited
3) SSKM- SS Kothari Mehta & Co.
4) Report- Advisory Report on Valuation of Lime Kiln Undertaking of JKETL
5) Undertaking- Lime Kiln Undertaking of JKETL
6) Transfer Date- April 1, 2013
7) MT- Metric Tonne
8) SPV- Special Purpose Vehicle

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