Tamilnadu Petroproducts Limited

29th ANNUAL REPORT
2013 – 14

TPL

Board of Directors*

C.V. Sankar, IAS.	DIN:00703204	Chairman
Ashwin C Muthiah	DIN:00255679	Vice Chairman
C. Ramachandran, IAS (Retd)	DIN:00050893	Director
N.R. Krishnan,IAS (Retd)	DIN:00047799	Director
Dr. K.U. Mada	DIN:00011395	Director
Dhananjay N. Mungale	DIN:00007563	Director
T.K. Arun	DIN:02163427	Director
Sanjiv Ralph Noronha	DIN:01905639	Director
R. Karthikeyan	DIN:00824621	Director
M. Pazhaniandy Pillai	DIN:06874820	Whole-Time Director (Operations)
Muthukrishnan Ravi	DIN:03605222	Managing Director

* As on 1st July, 2014

Audit Committee

C. Ramachandran, IAS (Retd)	Chairman
N.R. Krishnan, IAS (Retd)	Member
Dr. K.U. Mada	Member
T.K. Arun	Member

Chief Financial Officer

K.R. Anandan

Company Secretary

R. Deepti

Registered Office & Factory

Manali Express Highway,
Manali, Chennai - 600 068.
Tel : 25941501 - 10 Fax : 25941139
CIN: L23200TN1984PLC010931
E-Mail: secy-legal@tnpetro.com
Website : www.tnpetro.com

Auditors

Deloitte Haskins & Sells
ASV N Ramana Towers,
52, Venkatanarayana Road,
T.Nagar, Chennai - 600 017.

Cost Auditor

Mr. P.R. Tantri
B-1580, Sahakara Nagar,
Bangalore - 560 092

Legal Advisor

Mr. T. Raghavan,
New No. 47, Old No. 25, T.T.K. Road,
Alwarpet, Chennai - 600 017

Bankers

IDBI Bank Ltd.
Axis Bank Ltd.
IndusInd Bank Ltd.
State Bank of India
State Bank of Bikaner & Jaipur
State Bank of Patiala
The Federal Bank Ltd.

Registrar & Share Transfer Agent (RTA)

Cameo Corporate Services Limited
“Subramanian Building”.
1, Club House Road,
Chennai - 600 002.
Tel : 28460084 / 28460395 Fax : 28460129

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FINANCIAL HIGHLIGHTS

(Rs. in crore)

Particulars	2009-10	2010-11	2011-12	2012-13	2013-14
Share Capital	89.97	89.97	89.97	89.97	**89.97**
Reserves & Surplus	287.13	305.94	306.45	255.70	**218.19**
Networth	356.44	375.45	376.16	325.61	**288.30**
Return on Capital Employed (%)	7.61	12.54	9.21	(9.94)	**(3.13)**
Fixed Assets (net)	388.31	354.75	355.63	328.95	**302.25**
Sales / Other Income	914.03	1,074.35	1,259.82	1,286.96	**1,063.94**
Gross Profit / (Loss)	65.44	73.68	75.3	(0.34)	**7.09**
Interest / Finance Charges	21.29	28.54	31.66	31.83	**32.27**
Depreciation	30.82	37.99	37.19	38.62	**30.43**
Current Tax	1.59	5.03	3.91	-	**-**
Deferred Tax	0.97	(5.12)	(3.40)	(21.97)	**(18.30)**
Net Profit / (Loss)	10.77	29.47	5.94	(50.56)	**(37.30)**
Dividend (incl. Tax)	5.26	10.46	5.23	-	**-**
Dividend (%)	5.00	10.00	5.00	-	**-**
Earnings Per Share (Rs.)	1.20	3.28	0.66	(5.62)	**(4.15)**

TPL

DIRECTORS' REPORT AND MANAGEMENT DISCUSSION AND ANALYSIS REPORT TO THE SHAREHOLDERS

Your Directors have pleasure in presenting the Twenty Ninth Annual Report on the business and operations of the Company and the audited Statement of Accounts for the year ended 31st March 2014.

FINANCIAL RESULTS (Rs. in crore)

Description	2013-14	2012-13
Revenue from Operations	**1051.82**	1281.42
Earnings before Interest Depreciation and Tax	**7.09**	(0.34)
Less: Finance Cost	**(32.27)**	(31.83)
Less: Depreciation	**(30.43)**	(38.62)
Less: Exceptional Item	**-**	(1.74)
Loss before tax	**(55.60)**	(72.53)
Tax expenses	**(18.30)**	(21.97)
Loss after tax	**(37.30)**	(50.56)
Balance carried to Balance Sheet	**2.88**	40.19

OPERATIONAL HIGHLIGHTS AND PRODUCT-WISE PERFORMANCE

During the year under review, revenue from operations was Rs.1051.82 crore vis a vis Rs. 1281.42 crore in FY 2012-13. The loss for the year was lower at Rs. 37.30 crore against Rs. 50.56 crore in the previous year. Also the Company made an operating profit of Rs. 5 crore against operating loss of Rs. 34 lakhs in FY 2012-13. These could be achieved through concerted efforts to cut the cost and also ensure the best possible market realization, given the tough conditions faced by the Company due to unabated imports of LAB and Caustic Soda into India during the year under review.

Capacity utilization of Linear Alkyl Benzene (LAB) facilities was lower due to the domestic customers opting for imports in large scale. Increase in crude price and increase in power cost coupled with uncertainities in uniterrupted supply continued to be limiting factors to recover the fixed costs in full, resulting in losses. In order to bring down the cost of production, use of Captive Power Plant (CPP) was curtailed on trial basis. However, due to inconsistency in the supply of power from the EB grid, the CPP had to be operated continuously to avoid frequent interruptions and the cost of heavy re-start. In spite of the cost of power from CPP being higher on account of increased fuel prices, TPL had no alternative but to resort to such a measure to meet customer commitments bringing down the margins further.

The Chlor Alkali Division producing Caustic Soda and Chlorine was operated at a reduced load to optimize the cost of production forcing a dip in capacity utilization. However, the better quality of the output reduced the erosion of margins to some extent.

The ECH Plant, operation of which has been suspended since the beginning of the year on account of the huge and perpetual losses, continued to provide effluent treatment services to Petro Araldite Private Limited, the joint venture company.

FINANCIAL REVIEW

The finance cost as a ratio of total operating income was higher at 3.07% against 2.48% mainly on account of dip in the revenue by 22%. Due to the poor financial performance over the last two years, the Company has been facing difficulties in raising the required funds, as the lenders are not inclined to look at any further exposures. In fact some of them have resorted to reduction in the limits, compounding the cash flow issues further. Under these circumstances, in order to sustain the operations, the Company had to arrange long term funds only through divestment of its major non-core asset, the TPL House for which agreement has been entered into during the year. A part of the payment consideration has been received and used to fund the working capital requirements.

Owing to losses, the CARE downgraded the rating from BBB+ to BBB, signifying that the Company has current capacity to meet its debt obligations. The average cost of finance was slightly higher than the last year mainly due to the above revision in the rating. During the year under review, there were no defaults either in servicing or repayment of debts.

DIVIDEND

In view of the losses incurred, the Board of Directors expresses its inability to recommend any dividend for the year.

INDUSTRY STRUCTURE AND DEVELOPMENTS

Your Company has three manufacturing units viz., Linear Alkyl Benzene (LAB), Chlor Alkalis comprising Caustic Soda & Chlorine and Epichlorohydrin (ECH).

LAB, a colorless organic compound is an intermediate chemical used in the manufacture of household and industrial cleaning agent and enjoys a good demand from the detergent industry as its basic raw material. Based on application, the LAB market can be broadly segmented into Linear Alkylbenzene Sulfonate (LAS) and other applications. A major portion of the global LAB production is utilised for the production of LAS. The applications for LAS have been further segmented on the basis of the end use namely heavy-duty laundry liquids, light-duty dishwashing liquids, and laundry powders, industrial and household cleaners. Heavy-duty laundry liquids are mainly used for commercial laundry purposes and are the most dominant application segment for LAS. It has been reported that the demand for household cleaners is expected to exhibit the fastest growth rate amongst all the application segments. Other niche applications of LAB include ink solvents, agricultural herbicides, wetting agents, emulsion polymerization, electric cable oil and the paint industry.

All the major manufacturers of LAB in India, including TPL, have adopted the technology from UOP, USA, which is considered superior to the other processes involving chlorination. The cost of production of LAB in India had been relatively higher than the international standards mainly on account of higher cost of kerosene and quality issues relating to the feedstock.

Till recently, the domestic demand for LAB was being met fully through indigenous sources and a substantial quantity was being exported. However, from the year 2012-13, there has been a sudden spurt in import of LAB into India, mainly attributable to global economic slowdown and creation of new capacities in the Middle East. The imports during 2013-14 was more than 2.20 lakh tons against 1.15 lakh tons in the previous year. The sharp decline in the rupee value during the year also hit the profitability, though this led to lower imports during the period and TPL could regain some lost ground.

In sum, with very high crude price and rupee depreciation the cost of production of LAB was went up substantially but such higher cost could not be passed on in full to the customers, due to competition from overseas suppliers.

Caustic Soda, a most commonly used industrial chemical, finds wide application in Textile, Pulp & paper, Aluminium, Soaps & detergents industries in India. The capacity in India was about 31.34 lakh ton in March 2013 with a capacity utilization of around 81%. The capacity is expected to increase to 34.5 lakh ton by March 2015. India has enough capacity to meet the domestic demand but due to dumping from overseas, the capacity utilization has been low.

Chlorine, a co-product of Caustic Soda is widely used in sectors like Vinyl chloride, CPW, pulp and paper, water purification, chlorinated solvents, etc. Since this is a co-product of Caustic Soda, the prices take a dent when the demand for caustic soda increases and hence the pricing of the product has been affected considerably.

ECH is used as a key raw material in the manufacture of epoxy resins, pesticides and certain pharmaceutical formulations. Though there has been good demand for the product at global level, most of the top manufacturers use their entire capacity for captive consumption. The market is already reeling under supply - demand mismatch and new capacities created across the globe, especially in China, have worsened the situation.

Traditionally, ECH has been produced through petro-based feedstock, viz., propylene. However, glycerine, a bio-based feedstock obtained easily as byproduct from biodiesel production, is slowly replacing propylene. It is expected that the increasing availability of bio-based glycerine from biodiesel production would make it possible to produce bio-based ECH, at a lower cost.

OPPORTUNITIES AND THREATS

Over the past few years there has been a marked improvement in awareness about hygiene and also the standard of living has shown considerable improvement in India. This has helped the detergent markets to make inroads into remote areas, with the help of visual advertisements. Therefore the production of detergents is expected to grow further, paving way for higher off-take of **LAB** in the years to come**.** However, the surplus capacity creater overseas has resulted in dumping of materials in to India leading to price war. This constraints the Company's ability to realise the price in full.

Caustic Soda continues to be an important industrial intermediary finding application in many industries. With the demand for textiles and apparels increasing on account of urbanization and more spending on personal effects, the market for Caustic Soda is expected to grow further. However, unabated increase in cost of power is curbing the profitability of the domestic manufacturers. Also the ever increasing imports has been affecting the margins and the profitability of domestic players.

The per capita consumption of **Chlorine** in India is stated to be around 1.85 kg vis a vis 13 kg in China and hence there exists good growth opportunities. However, this could happen only if substantial investments are made in the vinyl industry, the key end-user of the product. Downstream PVC Industry in India is growing @ 14% (YOY in 2012-13) but not utilizing domestic chlorine due to non-availability of petro-chemical feedstock. India is one of the largest importers of EDC & VCM i.e. indirect imports of chlorine leading to low utilization of domestic chlorine. The problems of storage and disposal of Chlorine during peak demand for Caustic Soda are the major limiting factors for both Caustic Soda and Chlorine.

OUTLOOK

LAB

Import of LAB is increasing year on year which will impact the margins of TPL further. During the year 2013-14, the imports doubled to 2.15 lakh tons which were over 1 lakh ton in 2012-13. This trend may continue in the current year. TPL has established itself as a major player in the LAB market and hence the customer base is expected to be retained, in spite of competition through imports. To overcome the increase in input cost, various energy saving measures have been taken up and modification in pre-fractionation unit has been initiated. As a step forward, TPL is also looking at increasing the NP capacity to bringdown imports.

Caustic Soda / Chlor alkali

The Global Caustic Soda growth is expected to be 3.2% by 2018. Alumina and Pulp & Paper sectors, major consumers of Caustic Soda have been impacted by the global economic outlook. It has been stated that the growth in many of developed regions will be slow. On the other hand based on the ongoing expansion projects, the caustic soda availability from the USA, Asia and Middle East will be more, threatening to further increase the imports into India, which is already affected by huge and ever-increasing imports. The imports have doubled in about 3 years at 3.79 lakh tons in 2013-14 from 1.87 lakh tons in 2010-11. The imports during April 2014 alone were over 56,000 tons, against 24,000 tons in the corresponding period in the previous year.

It has been reported that the Indian industry is capable of meeting its domestic demand but because of high input costs and poor infrastructure, is not competitive internationally. It also faces dumping of cheap imports from other countries like Iran, Saudi, Korea RP, Japan, etc. where power is available at a lower price. To overcome this, focus will have to be on zero liquid discharge and reduction in power consumption which will need more of integrated plants. However, under the present conditions TPL may not be able to go for integration and hence the long term survival of the HCD would depend on the success of the cost cutting efforts taken by the Company.

ECH

TPL is looking at alternate options for using the ECH facility which at present remains moth-balled. It is being explored if the facilities can be modified for the manufacture of Propylene Oxide so that the Company would be able to use the Chlorine as well and contribute to the overall operations.

RISKS AND CONCERNS

As stated earlier, the import of LAB, Caustic Soda and indirect form of Chlorine is the major risk faced by TPL. The average realization continues to be low and the efforts of the Company to curtail the imports through combined action of the domestic manufacturers did not materialize.

TPL is a power intensive industry and hence the renewable purchase obligation, which is being challenged by the Company at the appropriate forum, could be a dampener in its efforts to bring down the power cost. Also, the cost of salt and transportation are going up due to various factors. If the oil subsidy is marginalized, the input cost for TPL could go up substantially and the survival of the Chlor Alkali Division in the long run could be a major concern to be addressed by the Company.

SAFETY, HEALTH & ENVIRONMENT

Adequate safety standards have been prescribed and followed by the Company without compromise. Prime importance is given to protection of the employees, plant & machinery and environment at all times.

During the year a mock drill operation was held to show-case the preparedness of the Company to meet emergencies. The program was organized as a part of the Conference on Chemical (Industrial) Disaster Management held under the aegis of the National Disaster Management Authority and FICCI at Chennai during November 2013. More than 120 delegates from all over the country participated in the programme in addition to the dignatories from various government agencies who were appreciative of the systems and procedures being practiced by the Company.

Your Company has planted saplings in and around the factory premises as part of its green initiatives and to promote carbon offset.

SUBSIDIARIES

Certus Investment and Trading Ltd., and its wholly owned subsidiaries

Your Company established Certus Investment and Trading Ltd. (CITL), Mauritius as its Wholly Owned Subsidiary (WOS) to serve as a Special Purpose Vehicle (SPV) to set up LAB and NP projects in Middle East and South East Asia. CITL in partnership with Saudi Offset Limited Partnership (SOLP) promoted Gulf Petroproduct Co. EC (GPC) to implement a LAB project in the Middle East. The project was affected due to varied factors, mainly regulatory issues in Bahrain. Therefore the project had to be abandoned and the company was liquidated voluntarily.

CITL also established CITL (S) Pte. Ltd. in Singapore to function as a coordinator for TPL's overseas procurement and marketing activities.

Proteus Petrochemical Private Ltd. (Proteus) is a subsidiary of CITL formed for setting up a Normal Paraffin Project in Singapore. The proposal is to establish a green-field Normal Paraffin (NP) project plant along with associated utilities and off-sites. The project has run into certain problems and hence there has been delay in completing the same as per schedule. The Company is examining further action to be taken in this regard.

Information under Section 212

A statement pursuant to Section 212 of the Companies Act, 1956 (the Act) giving information on the subsidiary companies is attached hereto. In terms of the general exemption granted by the Ministry of Corporate Affairs under Section 212 of the Act, vide General Circular No. 2/2011 dated 8th February 2011 copies of the financial statements and other documents of the subsidiary companies have not been attached to this Report. The Consolidated Financial Statements presented herewith include the financial information of the subsidiaries, as required under Accounting Standard AS-21 issued by the Institute of Chartered Accountants of India.

The annual accounts of the subsidiary companies and the related detailed information will be made available to the shareholders of the Company and the subsidiary companies seeking such information and shall also be available for inspection at the Registered Office of the Company and the subsidiaries.

JOINT VENTURE

Petro Araldite Pvt. Ltd. (PAPL)

PAPL was set up in the year 1996 to manufacture basic resins for epoxy applications and the present JV Partner is Vantigo. PAPL has facilities to manufactuer of Basic Liquid Resin, Solid Resin and Formulated products.The performance of the JV has been cyclical, but in the recent past PAPL has been incurring losses due to changed market scenario.

With the conditions not improving, PAPL has closed down their Basic Resins manufacturing facilities during the 2nd half of the year and is now operating only its' formulations plant.

As per the unaudited figures furnished by PAPL, the total revenue during the year was Rs. 219.54 crore compared to Rs. 354.54 crore during 2012-13. The company incurred a loss of Rs. 8.29 crore against Rs. 14.45 crore in the previous year.

HUMAN RESOURCES

Management strongly believes that the strength of your Company is directly proportional to the strength of its employees in terms of the knowledge, experience, analytical and decision making skills. Your Company has been practicing various HR initiatives such as recognition, empowerment, personality development, decentralization of delegation of powers etc., to retain the talents and to enhance their enabling capabilities. A balanced staffing system has been judiciously adopted in your Company wherein competent fresh talents have been engaged to infuse young blood into the steam of experienced hands.

The training needs of employees have been identified at regular intervals through performance appraisal systems and necessary training is being imparted through in-house and external programmes. Apart from the routine, job related training for personality development and leadership skills are imparted to enhance the administrative capabilities of employees.

The wage settlement dispute with LAB/ECH wokmen pending since 2005 was settled through negotiations. However, this has not helped restoring the cordial industrial relations owing to the indifference and unfair practices of the workmen. A stiff resistance by the workmen to the various measures taken by the Management to cut-down cost and increase productivity is snow-balling and the Management is adopting a wait and watch approach to avoid precipitating the issues further for the overall benefit of all the stakeholders.

The man power strength as on 31st March 2014 was 429 and none of the employees of your Company was in receipt of remuneration exceeding the sum prescribed under Section 217(2A) of the Act.

DIRECTORS

The Board at the meeting held on 29th October 2013 recorded the resignation of Mr N S Palaniappan, IAS, Director & Chairman. The Board places on record its appreciation for the invaluable services rendered by Mr. Palaniappn during his association with the Company.

Mr Hans Raj Verma, IAS, Chairman and Managing Director of TIDCO was transfered and consequently he resigned as a Director of TPL which effective from 18th June 2014. The Board places on record its appreciation for the invaluable services rendered by Mr. Verma during is association with the Company.

Mr C V Sankar, IAS appointed as Director & Chairman by the Board at the meeting held on 29th October 2013 holds office upto the date of the ensuing Annual General Meeting.

Mr. M Pazhaniandy Pillai was appointed as an Additional Director under Section 152 of the Act and Whole-time Director (Operations) by the Board at the meeting held on 27th May 2014. His appointment as a Director liable to retire by rotation under Section 160 of the Act and approval for his appointment as Whole-time Director (Operations) and his remuneration will be considered at the ensuing AGM.

At the aforesaid meeting of the Board, Mr. C Ramachandran, IAS, (Retd.), Mr. N R Krishnan, IAS (Retd.), Dr. K U Mada and Mr. Dhananjay Mungale have been appointed as Independent Directors under Section 149 of the Companies Act, 2013 (the new Act) and are not liable to retire by rotation. As per the provisions of the new Act, their appointment are to be approved by the shareholders in the general meeting and hence the same is proposed to be considered at the ensuing AGM.

Mr. R Karthikeyan, Director, retires by rotation and being eligible, offers himself for re-election.

DIRECTORS' RESPONSIBILITY STATEMENT

In compliance with the provisions of Section 217(2AA) of the Act, your Directors hereby confirm that: -

(i) In preparing the Annual Accounts for the year ended 31st March 2014, all the applicable accounting standards have been followed;

(ii) Prescribed accounting policies were adopted and applied consistently and judgments and estimates made that are reasonable and prudent so as to give a true and fair view of the state of affairs of the Company as at 31st March 2014 and of the loss of the Company for year ended on that date;

(iii) Proper and sufficient care for the maintenance of adequate accounting records have been taken in accordance with the provisions of the Act for safeguarding the assets of the Company and for preventing/detecting fraud and irregularities; and

(iv) The Annual Accounts have been prepared on a "going concern" basis.

ADEQUACY OF INTERNAL CONTROLS

Your company has in place adequate internal control systems combined with delegation of powers and periodical review of the process. The control system is also supported by internal audits and management reviews with documented policies and procedures.

CORPORATE GOVERNANCE

Your Company has complied with the requirements of Corporate Governance as required under Clause 49 of the Listing Agreement entered into with the Stock Exchanges. A Report on Corporate Governance is made a part of this Report and a Certificate from the Auditors regarding compliance with the requirements of Corporate Governance is attached to this report.

AUDITORS

M/s. Deloitte Haskins & Sells, appointed as the Auditors of the Company at the 28th Annual General Meeting held on 5th August 2013 hold office till the conclusion of 29th Annual General Meeting and are eligible for re-appointment. As per Section 139 of the new Act, they can hold office from the conclusion of the 29th AGM till the conclusion of the 31st AGM. Their re-appointment will have to be ratified by the Members at the AGM, each year. In compliance with the requirements of the new Act, it is proposed to appoint the retiring Auditors to hold office till the conclusion of the 31st AGM to be held in the year 2016 and subject to ratification at the 30th AGM.

COST AUDIT

The Cost Audit Report for the year ended 31st March 2013, duly certified by Mr. P R Tantri, Cost Accountant, was filed on the due date i.e. on 27th September 2013. Mr. P.R. Tantri, Cost Accountant has been appointed as the Cost Auditor of the Company for the financial year 2013-14 pursuant to Section 233B of the Act.

FIXED DEPOSITS

Your Company has not accepted any deposits from the public during the year under report.

ENERGY, TECHNOLOGY AND FOREIGN EXCHANGE

Particulars relating to conservation of energy, technology absorption and foreign exchange earnings and outgo, as required under Section 217(1)(e) of the Act, are attached, to the extent applicable, and form part of the Report.

ACKNOWLEDGEMENT

Your Directors are grateful to the Government of India, the Government of Tamilnadu, financial institutions, banks, other lending institutions, promoters, technical collaborators, suppliers, customers, joint venture partners and marketing agents for their assistance, co-operation and support. The Directors wish to thank the shareholders for their continued support. The Directors also place on record their appreciation for the contributions by the employees.

DISCLAIMER

Estimates and expectations stated in the Reports of the Directors and Management Discussion and Analysis may be "forward-looking" statements within the meaning of applicable securities laws and regulations. Actual results could materially differ from those expressed or implied in these reports on account of any change economic conditions affecting demand / supply and price of the products, input cost, in the domestic and international markets, changes in the Government regulations, tax laws, statues and other incidental matters over which the Company has no direct or indirect control.

For and on behalf of the Board of Directors

C V SANKAR, IAS
Chairman

1st July 2014
Chennai – 600 068

TPL

Annexure to Directors' Report

Particulars as required under Companies (Disclosure of particulars in the Report of Board of Directors) Rules, 1988 for the year ended 31st March 2014 are furnished below to the extent applicable:

A. CONSERVATION OF ENERGY

a) The following are the energy conversation measures implemented by the Company during the year under review and the impact of the same:
- Induced draft fan F 1601R in Hot oil heater was de-rated to suit present operating conditions to save energy of about 1200 units/day
- Hot oil line from Pacol charge heater was re-routed to utilize waste energy of about 0.37 mkcal/hr.
- Zero gap retrofit and membrane replacement in Chlor alkali division has resulted a saving of 10.16 lac units per annum.
- Replacement of old motors with energy efficient motors is being done in Chlor alkali division in phased manner

b) Details of total energy consumption and energy consumption per unit of production are furnished in Form A below:

FORM - A

Form for disclosure of particulars with respect to conservation of Energy

		Current year 2013-14	Previous year 2012-13
(A)	**Power and Fuel Oil consumption**		
1)	**Electricity**		
	a. Purchased from TNEB		
	Units (in lakhs)	**814.52**	750.80
	Variable cost (Rs. in lakhs)	**4,750.95**	4,388.10
	Total cost (Rs. in lakhs)	**5,565.78**	5,292.70
	Rate/Unit (Rs.)		
	Units charges (Rs. / Unit)**	**5.83**	5.84
	Demand charges (Rs. / KVA)	**300**	300
	**Variable cost includes peak hour charges		
	Purchased from Third Party	**196.33**	488.92
	Total Cost (Rs. in lakhs)	**1,236.39**	3,030.85
	Unit charges (Rs. / Unit)	**6.30**	6.20
	Units (in lakhs) From IEX Power	**43.019**	93.05
	Total Cost (Rs. in lakhs)	**229.685**	634.65
	Unit Charges (Rs./Unit)	**5.34**	6.82
	Units (In Lakhs) from wind power	**65.985**	-
	Total Cost (Rs. in Lakhs)	**358.02**	-
	Unit Charges(Rs./Unit)	**5.43**	-
	b. Own generation		
	Through Diesel generator		
	Units (in lakhs)**	**512.377**	749.07
	Units/Litre of fuel	**4.0**	4.00
	Rate/Unit (Rs.)	**10.11**	10.04
	**Includes power exported to grid		
2)	**Furnace oil/LSHS**		
	Quantity (KL)	**50,833.90**	73,704.90
	Total amount (Rs. in lakhs)	**19,095.64**	26,355.63
	Average rate (Rs./KL)	**37,565**	35,758.30
3)	**Diesel**		
	Quantity (KL)	**17.46**	20.965
	Total amount (Rs. in lakhs)	**10.66**	9.41
	Average rate (Rs./KL)	**61,045**	44,900.10

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(B) Consumption per unit (MT) of production

Products with details	(Standard if any)	**Current year**			Previous year		
		LAB	**ECH**	**CAD-Caustic**	LAB	ECH	CAD-Caustic
Electricity (KWHR/MT)		**643.54**	**-**	**2702.0**	613.02	1433	2772
Furnace oil (MT)		**0.493**	**-**	**0.091**	0.4867	0.781	0.065
Coal (Specify Quality)		**-**	**-**	**-**	-	-	-
Others (Specify)		**-**	**-**	**-**	-	-	-

B. TECHNOLOGY ABSORPTION

Efforts made in technology absorption are shown in Form B below:

FORM-B

I Research & Development (R&D):

Research and development activities are mainly focused towards enhancing the quality of the products manufactured by the company and improving the process of manufactured to achieve better specific consumption of raw materials and chemicals. Studies are also conducted to develop new applications for existing by-products of the company.

1) Specific Areas in which R&D carried out by the company

- Development of new applications for existing products
- Studies are related to improvement of quality of Products.

2) Benefits derived as a result of above R&D

- Value addition of new applications for existing products by developing new applications
- Improving the customer satisfaction there by retaining the existing customers.
- Aim to contribute for improving turnover with existing inputs

3) Future Plan of Action

- Development of new applications for side stream products
- Studies aimed at improving specific consumption norms.

4) Expenditure on R&D

a. Capital expenditure : NIL
b. Recurring expenses : Rs. 5.81 lakhs
c. Total : Rs. 5.81 lakhs
d. Total as a % of total turnover : 0.01%

II Technology Absorption Adaptation and Innovation

Improvements in the process developed by the Company's R&D department have been adopted in production wherever applicable.

C. FOREIGN EXCHANGE EARNINGS AND OUTGO

i. Earnings - Rs. 5,474.83 lakhs
ii. Outgo - Rs. 6,048.48 lakhs