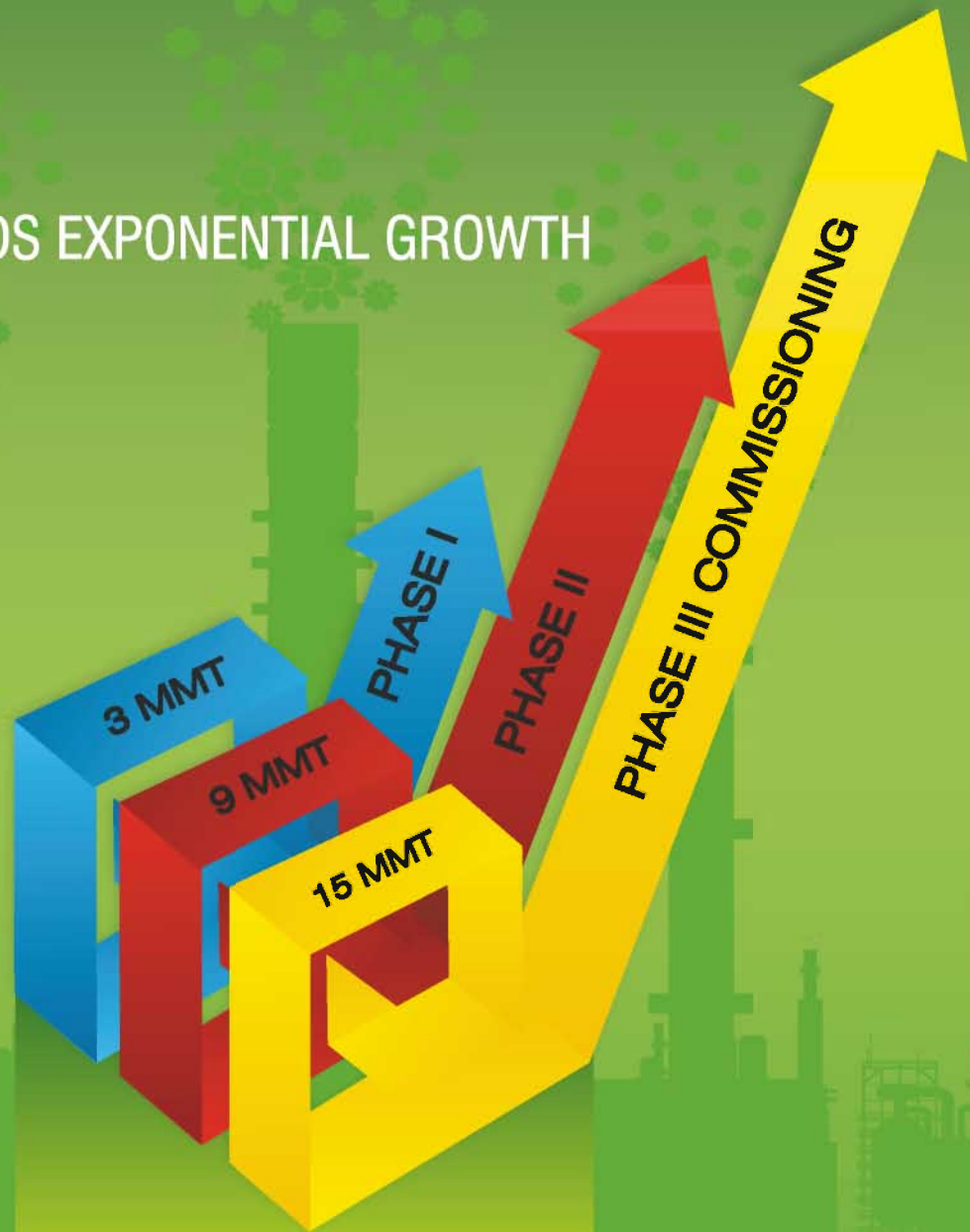


**24<sup>th</sup> ANNUAL  
REPORT  
2011-12**

वार्षिक रिपोर्ट २०११-१२

**TOWARDS EXPONENTIAL GROWTH**



**Mangalore Refinery and Petrochemicals Ltd.**  
( A subsidiary of Oil and Natural Gas Corporation Ltd. )



**Inauguration of Hydrogen Generation Unit (Phase - III)**



**Unveiling of products produced from CDU/VDU of Phase - III**

# Mangalore Refinery and Petrochemicals Limited

## BOARD OF DIRECTORS

Shri Sudhir Vasudeva	Chairman
Shri P.P. Upadhya	Managing Director & Director (Technical)
Shri Vishnu Agrawal	Director (Finance)
Shri Vivek Kumar	Director
Shri K. Murali	Director
Dr. A.K.Rath	Independent Director
Shri.B Ravindranath	Independent Director
Dr. D. Chandrasekharam	Independent Director
Shri A.K. Hazarika	Special Invitee
Shri K.S. Jamestin	Special invitee

### COMPANY SECRETARY

Shri Dinesh Mishra

### REGISTERED OFFICE

Mudapadav, Kuthethoor,  
P.O Via Katipalla,  
Mangalore- 575 030, Karnataka  
Tel. No.: 0824-2270400  
Website.: www.mrpl.co.in

### SOLICITORS & ADVOCATES

M/s. Mulla & Mulla & Craigie Blunt & Caroe, Solicitors.  
M/s. Alaya Legal, Advocates.

### JOINT STATUTORY AUDITORS

M/s. Maharaj N.R. Suresh & Co,  
Chartered Accountants  
M/s. Gopalaiyer & Subramanian,  
Chartered Accountants

### COST AUDITOR

M/s. Musib & Associates  
Cost Accountants

### BANKERS

State Bank of India,  
Bank of Baroda,  
Punjab National Bank,  
United Bank of India,  
Canara Bank,  
Corporation Bank,  
IDBI Bank Ltd,  
Citibank N.A

### INVESTOR RELATION CELL

#### MANGALORE REFINERY AND PETROCHEMICALS LIMITED

- Mudapadav, Kuthethoor,  
P.O Via Katipalla,  
Mangalore- 575 030, Karnataka  
Tel. No.: 0824-2270400, Fax No.: 0824-2271404
- LGF, Mercantile House  
15, K.G. Marg, New Delhi – 110 001  
Tel : 011-23463100 Fax : 011-23463201  
E-mail: investor@mrplindia.com  
Website.: www.mrpl.co.in
- **M/s. LINK INTIME INDIA PVT.LTD (R&T Agent)**  
C-13 Pannalal Silk Mills Compound,  
L.B.S Marg, Bhandup (West),  
Mumbai- 400 078  
Tel.: 022-25963838 / 25946970  
Fax No.: 022-25946969  
E-mail: mrplirc@linkintime.co.in  
Website.: www.linkintime.co.in

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## DIRECTORS' REPORT

Dear Members,

On behalf of the Board of Directors, I take pleasure in presenting the 24<sup>th</sup> Annual report on the performance of your company, together with the Audit report and Audited account for the year ended 31/03/2012.

It is a matter of immense satisfaction that the performance of your company both on the Physical as well as Fiscal parameters created certain new benchmarks of excellence during the year 2011-12.

Major highlights of your Company's performance during the year are enumerated below:

1. Highest ever Refinery crude thrupt at 12.82 MMTPA.
2. Highest ever Turnover at ₹ 572,068 Million.
3. Highest ever Export Turnover at ₹ 234,183 Million.
4. Lowest ever Energy consumption index of 57.92 MBN.
5. Nameplate capacity of the refinery has been enhanced to 15 MMTPA with successful commissioning of 3 MMTPA Crude and Vacuum Distillation Unit III (CDU&VDU III) of Phase-III project on 29/03/2012.
6. With Commissioning of CDU and VDU-III before 31/03/2012 your Company is eligible for benefits under Section 80(IB) of the Income Tax Act, 1962 for Phase-III project.
7. Government of Karnataka has sanctioned an attractive Tax Incentive package for the Phase-III project.
8. Diesel Hydro Treater/ Hydrogen Generation/ Coker Gas Oil Hydro Treater Units were mechanically completed before 31/03/2012.
9. DPE Adjudged performance of your company as "Excellent" for the year 2010-11 against the MoU target.

### 1.1 FINANCIAL PERFORMANCE

	Year ended 31 <sup>st</sup> March, 2012	Year ended 31 <sup>st</sup> March, 2011
(₹ In Million)		
<b>Turnover</b>	<b>572,068</b>	<b>437,236</b>
Profit before Depreciation	19,608	22,332
Interest and Tax	2,067	1,047
Gross Profit after interest but before Depreciation and Tax	17,541	21,285
Depreciation and Amortizations	4,339	3,914
<b>Profit Before Tax</b>	<b>13,202</b>	<b>17,371</b>
Provision for Taxation	4,116	5,605
<b>Profit after Tax</b>	<b>9,086</b>	<b>11,766</b>
Balance of Profit/(Loss) brought forward from previous year	42,998	33,959
<b>Surplus available for appropriation</b>	<b>52,074</b>	<b>45,727</b>
<b>Appropriations:</b>		
Proposed dividend on Preference Shares (₹ 9,186)	0.000	0.00
Proposed Dividend on Equity Shares	1,753	2,103
Tax on Dividend	284	341
Transfer to Capital Redemption Reserve	46	-
Transfer to General reserve	-	295
<b>Balance carried to Balance Sheet</b>	<b>49,991</b>	<b>42,988</b>

### 1.2 DIVIDEND

The Board of Directors of your company is pleased to recommend dividend payout of 10% (₹ 1/- per equity share) of ₹ 10/- each fully paid-up in view of the ongoing project investment and the reduced profitability. This will absorb ₹ 2,036 Million including ₹ 284 Million as dividend distribution tax.

### 1.3 OPERATIONAL PERFORMANCE

The Highest ever Refinery thrupt was 12.82 MMTPA for the year 2011-12 compared to 12.64 MMTPA during the previous year. During the last fiscal, your Company has completed the revamp of its CDU/ VDU –I unit as well as Hydro Cracker Unit-II. Your company, keeping in view the process requirement and to maintain high utilization of its assets, has planned these revamps along with the turnaround shutdowns during the year 2011-12. During the year 2011-12, your company has processed three new crudes i.e., Agbami, COCO, Mellitah and continues to expand its crude basket.

### 1.4 EXPORTS

Your company has achieved highest ever export turnover of ₹ 234,183 Million during the year 2011-12 by exporting products like Motor Spirit (MS), Naphtha, Mixed Xylene, High Speed Diesel (HSD), Jet fuel and Fuel Oil (FO).

Your Company continues to have the Term export contract for the supply of petroleum products to Mauritius with the State Trading Corporation (STC), Mauritius.

In the global competitive market, your company has secured its place by exporting the petroleum products and continues to explore opportunities for its growth.

### 1.5 SAFETY PERFORMANCE

The year 2011-12 witnessed successful and safe commissioning of CDU/VDU-III of Phase-III. Your company has also recorded longest accident free period of 1662 days during the year by surpassing previous best record of 1301 days during the year.

Your company is committed towards imparting continuous training in fire & safety practices. During the year under review, 885 Nos. of Plant employees and 7,184 Nos. of contract employees were trained in Fire and Industrial Safety. Employees of your company were also trained on safety aspects and practices during the year.

Your company has conducted Multidisciplinary Internal Safety Audit and OISD external surprise audit was also conducted during the year and its recommendations are being complied with.

### 1.6 ENVIRONMENT MANAGEMENT

Your company believes in "Perform beyond Compliance" for Protection of the Environment. Your Company is ISO 14001:2004 certified company, authenticated by TUV Rheinland.

Your Company has undertaken following major initiatives for Greener Environment during the last fiscal :

- Wet Air Oxidation Unit is under trial to treat Spent Caustic and to improve the WWTP performance.
- An advanced Reverse Osmosis Plant is being commissioned for maximizing the quantity of treated effluent recycle.
- Condensate Recovery Unit commissioned in CDU-1 resulting reduction in fresh water consumption. Similar units are planned for other process units as well.
- Second continuous ambient air quality monitoring system was installed in the refinery to monitor the ambient air quality.
- An external agency monitors Ambient Air Quality at 7 locations in and around the refinery.
- A Closed Bioremediation Unit is being commissioned in the refinery to treat oily sludge generated in the refinery.
- VOC Emission monitoring is being done at 74,000 points in the refinery through reputed agency and corrective measures taken to effectively minimize the same.
- Community awareness programme was organized in the neighboring villages in association with Karnataka State Pollution Control Board.
- In a unique partnership with Karnataka Forest Department, your company is developing green belt in 120 acres of land. As a first stage, 40,000 saplings are being grown in an offsite nursery by the Forest Department, which will be later transplanted in the green belt.

# Mangalore Refinery and Petrochemicals Limited

## 1.6.1 Environmental Performance:

Your company continues to comply with the Environmental Regulations and also making its best efforts for protection of environment by taking various steps.

Following major actions were taken to prevent water and air pollution.

### Water:

- Effluent treatment plant operation was normal throughout the year.
- Treated effluent quality was well within the prescribed limits.
- Seawater quality monitoring carried out by M/s. College of Fisheries indicates no adverse effect on the marine environment due to treated effluent discharge.
- Average treated effluent recycle to cooling towers during the year was about 74%
- Treated effluent after maximum recycle and within the stipulated standards are discharged into sea at a distance of 700 m and at a depth of 6.5m through diffusers for maximum dispersion & dilutions. Independent government agency monitors the marine ecology at the outfall point in the sea on a fortnight basis. Till date there has been no adverse effect on the marine eco-system.
- Cooling towers are operated at greater than 6 Cycles of concentration, this measure has brought down the cooling tower blow down. Refinery practices the cascade blow down system in the cooling towers to conserve water and chemicals.

### Air:

- Various energy conservation schemes are implemented for reducing air emission.
- Utilization of low sulphur (less than 1% S) fuel oil in furnaces, with average sulphur content, less than 1% maintained into fuel oil.
- Maximum utilization of Ultra Low Sulphur Fuel Gas (less than 10 ppm S) in furnaces.
- SRU units are running with more than 99% efficiency.
- Ambient air quality monitoring being done inside and outside the Refinery by reputed external agency as per revised National Ambient Air Quality Monitoring Standard set by Ministry of Environment & Forests (MoEF).
- Regular monitoring has minimized flaring.
- Daily average Sulphur dioxide emissions from the refinery kept beneath the prescribed limits of 40.0 T/day.

## 1.6.2 Solid Waste Management and implementation of Supreme Court Monitoring Committee (SCMC) Recommendations:

- 125 MT of spent activated carbon was disposed off.
- Bioremediation of 2000 Tonnes of oily sludge has been completed successfully.

## 1.6.3 Noise Pollution Control:

Acoustic enclosures are provided for DG sets at Sarapady and APMC pumping station.

## 1.6.4 Future Plans:

- Utilization of Liquefied Natural Gas (LNG) as alternative fuel in the Refinery.
- Vapour recovery System for light hydrocarbon storage tanks in Phase – III Refinery Project.
- VOC Recovery system in Waste Water Treatment Plant (WWTP) of Phase- III.

## 1.7 MARKETING

### Domestic Marketing of Products

Your Company continues to increase its market share in the direct sales segment of petroleum products in the state of Karnataka and its adjoining states. The direct sales turn over during the year was ₹ 27,552 Million compared to ₹ 22,912 Million in the previous fiscal.

During the year Bitumen sales was increased to 293 TMT from 248 TMT sold during the previous year, registering a growth of 18%, Furnace Oil sales was increased to 146 TMT during the year from 99 TMT sold during the previous year, registering a growth of 47% and Mixed Xylene sales was also increased by threefold during the year.

## 1.7.1 Retail Operations

Keeping in view the under recoveries in retail marketing of auto-fuels, your company continues to adopt a non aggressive approach with its miniscule presence in the retail marketing.

## 1.7.2 New Products Marketing Plan

Your company is setting up a Polypropylene (PP) plant with the capacity of 440 KTPA, integrated with Phase- III expansion of refinery complex with an investment of ₹ 18,037.8 Million for supplying to downstream processing industry. Detailed business plan for sale of Polypropylene in domestic market is being finalized. Storage infrastructure for Polypropylene is being developed at Hassan in the State of Karnataka.

Your company is also setting up a Delayed Coker Unit (DCU) in its Phase- III expansion project, which will produce Petcoke, a new product in the product basket. Detailed business plan is being finalized for sale of Petcoke to major Industrial consumers in Southern India.

## 1.7.3 Joint Ventures

Your Company is in Joint Venture (JV) with Shell B.V. Netherland known as Shell MRPL Aviation Fuel Services Private Limited (SMAFSPL) which supplies Aviation Turbine Fuel (ATF) to both domestic and international airlines at Indian airports.

SMAFSPL is aggressively acquiring market share in both domestic and international airlines at Indian airports. It has commenced its refuelling operations at Mangalore airport.

Your company continues to hold 50% equity in the Joint Ventures by holding 15 Million equity shares worth of ₹ 150 Million.

Turnover of this JV Company was ₹ 5,173.48 Million during the year against ₹ 2,867.03 Million during the previous year and the Pre-tax profit of ₹ 181.59 Million during the year against ₹ 136.28 Million during the previous year.

The JV Company declared its maiden dividend of ₹ 1 per equity share of ₹ 10 each fully paid during the year.

## 2. AWARDS AND RECOGNITION:

Your company has been recognized for its excellence in all of its operational areas and received following awards during the year:

- Won the “Unnatha Suraksha Puraskara” award – 2011 conferred by National Safety Council –Karnataka Chapter for Outstanding Performance in Safety Management Systems.
- “Excellent” MoU rating received from Department of Public Enterprise, Government of India for the year 2010-11.
- Secured second prize for outstanding performance in the area of Hindi implementation for the year 2010-2011 by the Town Official Language Committee (TOLIC), Mangalore.
- Won BT- STAR PSU Excellence award 2012 for Excellence in Market Capitalization.
- Won OISD ‘Most Consistent Performer (Refineries)’ Award for 2009-10

## 3. CREDIT PROFILE

- 3.1 ICRA Limited has reaffirmed Issuer Rating “Ir AAA” (pronounced IR Triple A) to your company. This rating indicates the highest credit quality rating assigned by ICRA and the rated entity i.e., which carries the lowest credit risk.
- 3.2 ICRA has reaffirmed the rating assigned to the ₹ 15,000 Million Fund- Based limits of your company at “[ICRA] AAA” (pronounced ICRA Triple A). The outlook on the rating is “Stable”.
- 3.3 ICRA has also reaffirmed the rating reassigned to the ₹ 55,000 Million Non-Fund based limits of your company at “[ICRA] A1+” (pronounced as ICRA A one plus).
- 3.4 ICRA has reaffirmed “[ICRA] A1+” (pronounced as ICRA A one plus). This rating indicates the very strong degree of safety regarding timely payment of financial obligations i.e., which carries the lowest credit risk.
- 3.5 CRISIL has reaffirmed “[CCR AAA] (pronounced as CCR Triple A). This rating indicates highest degree of strength with regard to honoring debt obligations by your company.

#### 4. FINANCIAL ACCOUNTING

The financial statements have been prepared in accordance with the Generally Accepted Accounting Principles (GAAP) and in compliance with all applicable accounting standards and as per the guidance note on accounting for activities of the company issued by The Institute of Chartered Accountants of India (ICAI) and provisions of the Companies Act, 1956. The financial statements have been prepared under the Revised Schedule VI format of the Companies Act, 1956 pursuant to notification of Ministry of Corporate Affairs (MCA), Government of India.

#### 5. INTERNAL CONTROL SYSTEM

Your company remains committed to ensure an effective internal control environment that provides assurance on the efficiency of operations and security of assets.

Internal audit department functions under the supervision of the Audit Committee chaired by an Independent Director. Your company has a well established internal control review mechanism which assures effective internal control environment to the Audit Committee and Board of Directors.

#### 6. PROJECTS

##### 6.1 Phase-III Refinery Expansion and Up gradation Project

As you are aware that your company is implementing Phase-III refinery expansion and up gradation project at an estimated cost of ₹ 121,600 Million, which will drive the future growth of the company.

Major highlights of Phase-III refinery expansion and up gradation project are as under:

- With the increased capacity of 15 MMTA your company is well placed in the market vis-e-vis its peers in the Industry.
- Your company is the second refinery in the country, capable of processing high TAN crudes.
- The 'Nelson Complexity Index' of the refinery of your company enhanced to approximately 9.0 from 6.0.
- The Distillate yield of the refinery will be increased by approximately 80%.
- Your company will produce value added products like Propylene from the low value black oil.
- The Diesel Hydro Treater (DHDT) of the refinery of your company will convert the High Speed Diesel (HSD) into Euro -III, IV and V grade for domestic and global market.

The Phase-III project is being executed in hybrid mode consisting of various modes of execution viz., Engineering, Procurement and Construction Management (EPCM), Open Book Execution (OBE) and Lump Sum Turn Key (LSTK). M/S Engineers India Limited (EIL) is the Project Management Consultant. M/S Jacob is the EPCM Contractor for the CDU/VDU and M/S EIL is the contractor for Petro Fluidized Catalytic Cracking Unit (PFCCU) and Sulphur Recovery Unit (SRU) which are executed under OBE and LSTK.

Your company has achieved an overall progress of 95.7% against scheduled target of 100% as of 15/07/2012 in Phase-III project and is in the process of progressive commissioning of the following major units:-

- (i) Hydrogen Generation Unit (HGU)
- (ii) Diesel Hydro Treater Unit (DHDT)
- (iii) Sulphur Recovery Unit (SRU)
- (iv) Captive Power Plant (CPP)
- (v) Petro Fluidized Catalytic Cracking Unit (PFCCU)
- (vi) Delayed Coker Unit (DCU)
- (vii) Coker Gas Oil Hydro Treater Unit (CHTU)

The crude was cut into CDU and VDU of Phase-III on 25/03/2012 after mechanical completion of necessary fire water network, flare network, utilities control systems and various finished products were routed to respective storage tanks on 29/03/2012.

Hydrogen Generation Unit (HGU) was successfully commissioned on 18/07/2012. Two crude storage tanks each having 60,000 m<sup>3</sup> capacity were commissioned on 30/3/2012 to enhance the crude storage capacity of the refinery of your company.

Wet Air Oxidation unit, a part of the auxiliary units/facilities was commissioned on 13/12/2011.

The Phase-III project has Hydrocarbon streams interconnections with the existing Phase- I & II of the refinery of your company. Revamp of the existing Hydro Cracker Units (HCU-1 and HCU-2) has been successfully completed and commissioned during May, 2012.

Your company is pleased to inform that the Government of Karnataka has given an attractive incentive package consisting of following fiscal benefits for Phase-III project:

- Exemption from payment of Entry Tax on plant and machinery and capital goods during the initial period of 4 years from the date of commencement of project implementation.
- Exemption from payment of Entry Tax on the crude oil thruput in Phase-III for 15 years from the start of commercial production of the Phase-III.
- Exemption from Central Sale Tax for 15 years from the date of commencement of commercial production for all the interstate sales.
- Interest free soft loan at the rate of 100% of eligible gross VAT for first 3 years and 60% of eligible gross VAT on the sale of Polypropylene, Petroleum Coke, LSHS, Naphtha, LPG (incremental production), Mixed Xylenes and reformat to non SEZ units for next 12 years to be repaid after 15 years by 15 equal annual installments limited to ₹ 5000 Million per annum.

The Phase-III project of your company is now eligible for Income Tax benefit under Section 80(IB) of the Income Tax Act, 1962 as it has successfully commissioned CDU and VDU of Phase-III project on 29/03/2012 before the sunset deadline of 31/03/2012. This benefit will place your company in a better position for competing with its peers in the market.

Hydrogen Generation (HG), Diesel Hydro Treater (DHDT), and Coker Gas Oil Hydro Treater (CHT) units along with related utilities were also mechanically completed before March 2012. The pre-commissioning activities of these units are nearing completion by extending steam and power from the existing facilities of Phase-I and Phase-II due to delay in commissioning of Captive Power Plant (CPP) of Phase -III by its LSTK contractor ( M/s BHEL). It is expected that M/s BHEL will be able to commission CPP of Phase-III by the end of September 2012 as assured by it.

##### 6.2 Polypropylene Project

As you are aware that your company is setting up a Polypropylene (PP) unit integrated with the Phase-III project at an estimated Capex of ₹ 18,037.8 Million. M/s. Engineers India Limited (EIL) has been engaged to implement this project under OBE convertible to LSTK methodology and M/s. Novolen Technology, Germany has been selected as the licensor for the same.

Project Displaced Families (PDF) problems had delayed the site work which resulted in shifting the location of this project. Fresh environmental clearance has been obtained from the Ministry of Environment and Forest (MoEF) due to shifting of the location.

Polypropylene Project has achieved an overall progress of 82.2% against scheduled target of 97.7% as of 15/07/2012. Cost commitment made for this project was ₹ 12,976.6 Million and the cumulative expenditure incurred was ₹ 5,492.1 Million as of 31/03/2012.

##### 6.3 Single Point Mooring (SPM) Project

Your company is setting up Single Point Mooring (SPM) project along with coastal booster pumping station within the port limits at a location of 16 kilometers inside the sea (High-Seas) having draft availability of 30 meters for handling Very Large Crude Carrier (VLCC) at an estimated cost of ₹ 10,440 Million.

SPM facility will have following advantages:

- a. Use of VLCC will reduce the average freight cost of crude.
- b. Flexibility to receive opportunity crudes from West African and Latin American countries.
- c. De-congestion of existing jetties at New Mangalore Port Trust (NMPT) will result in handling more petroleum products.
- d. Crude will be pumped to the Indian Strategic Petroleum Reserve Limited (ISPR) underground cavern for storage of Crude oil at Mangalore and Padur.

# Mangalore Refinery and Petrochemicals Limited

Single Point Mooring (SPM) project has achieved an overall progress of 95.6% against the scheduled target of 100% as of 15/07/2012 and is expected to commence trial operation by the end of September, 2012.

## 6.4 Future Projects for Growth

During Global Investors Meet on 7<sup>th</sup> & 8<sup>th</sup> June, 2012 at Bengaluru, your company has signed a Memorandum of Understanding with the Government of Karnataka for setting up a Linear Alkyl Benzene Plant (a raw material to manufacture Detergents) and to expand its refining capacity to 21 MMTPA subject to techno- economic viability and availability of required infrastructure at Mangalore with an approximate investment of ₹ 85,000 Million.

## 7. CONSERVATION OF ENERGY, TECHNOLOGY ABSORPTION AND FOREIGN EXCHANGE EARNINGS & OUTGO

The additional information required to be disclosed pursuant to Section 217(1) (e) of the Companies Act, 1956 read with the Companies (Disclosure of Particulars in the Report of Directors) Rules, 1988 with respect to conservation of energy, technology absorption and foreign exchange earnings & outgo are furnished in 'Annexure- I' which forms part of this Report.

## 8. PARTICULARS OF EMPLOYEES

Your company being a government company is exempted from disclosure of particulars of employees under Section 217(2A) of the Companies Act, 1956, and the Particulars of Employees Amendment Rules, 2011.

## 9. RIGHT TO INFORMATION ACT, 2005

Your company has a RTI manual posted in the website [www.mrpl.co.in](http://www.mrpl.co.in).

During the year 87 applications were received, out of which 82 were disposed off before 31/03/2012 and balance 5 applications disposed off after 01/04/2012.

## 10. HUMAN RESOURCES

- During the year 2011-12, your company continued to enjoy cordial and harmonious relations with the collectives and as evidence to the same not a single man-hour was lost on account of any industrial disturbance.
- Your company has recruited 168 employees including 13 women employees during the year 2011-12, out of these 20 employees are Schedule Caste (SC), 12 Schedule Tribe (ST) and 1 Physically Challenged (PC).
- Total employee strength as on 31/03/2012 was 1500 including 104 women employees, out of these employees, 597 are from Management cadre whereas 903 are from Non-Management cadre. The number of employees belonging to SC/ST categories are 129 and Physically Challenged are 5.
- During the year 2011-12, your company devoted 5095 man-days for Training, Development and Learning which amounts to an average 3.45 man-days per employee. This includes functional, developmental and special training programs covering the entire spectrum of employees.

## 11. OFFICIAL LANGUAGE (OL)

Your company continues to implement Official Language (OL) Policy as per the Annual Programme prescribed by the Department of Official Language, Ministry of Home Affairs, Government of India, in this regard following steps were undertaken during the year.

- Periodical reports are sent to all the Government agencies including Administrative Ministry, Ministry of Petroleum and Natural Gas (MoP&NG) highlighting the progress made in promotion of Hindi.
- Hindi workshops and Hindi classes namely Prabodh, Praveen and Pragya are organized on a regular basis.
- Special efforts were made to activate Unicode facilities on all the computers used in the office for increasing the correspondence in OL.
- To motivate employees, incentive schemes such as cash award and personal pay is introduced.
- An OL inspection of various departments and offices was carried out.

Hindi Fortnight was celebrated and many Hindi competitions such as Hindi dictation, Handwriting, Admin-Glossary, speech etc. were conducted for the employees and their family members during the year.

Competitions are also held in Hindi language for employees and their family members during National Safety Day, Environment Day, Security awareness week and Vigilance awareness week.

Hindi Hasya Kavi Sammelan was held on 30/03/2012, 5 National level eminent Hindi poets from different parts of the country participated in this programme organized by your company.

Official Language Implementation Committee (OLIC) meetings, were held on quarterly basis under the chairmanship of Managing Director. All out efforts are being made to promote OL in your company.

Your company has been awarded first prize for outstanding performance in Hindi implementation for the year 2011-12 by the Town Official Language Implementation Committee (TOLIC), Mangalore. Your company also won eight prizes and stood Second at the TOLIC level competitions.

## 12. VIGILANCE FUNCTION

Your company has developed a structured mechanism of vigilance functions and its practices are focused towards creation of value for all the stakeholders. The practices involve multi-layer checks and balances to improve transparency. Vigilance awareness and preventive vigilance activities were continuously carried out during the year. Guidelines of Central Vigilance Commission are being followed. Officers in sensitive posts are rotated regularly.

Whistle Blower Policy for employees is in place which ensures that a genuine whistle blower is granted due protection from any victimization. In compliance with CVC instruction, your company has implemented a complaint handling policy in which all complaints received from various sources can get recorded and can be examined by vigilance. Further, in line with CVC instruction, your company has achieved very high compliance level with regard to e-payment and e-tender.

Leveraging of technology to enhance transparency has been a thrust area of action in which vigilance has played a catalytic role. The website of the company displays downloadable tender document, publication of information of works awarded on nomination basis, publication of post award information of contracts.

## 13. SECURITY MEASURES

Your company continues to improve the security measures at the refinery. The following steps were taken to improve the security during the year:

### 13.1 CISF Induction

Ministry of Home Affairs (MHA) has approved induction of 200 CISF personnel for security of the refinery. A Quick Reaction Team (QRT) team consisting of 22 CISF personnel was inducted to guard the refinery. Construction of an exclusive Township for CISF personnel is underway at a cost of ₹ 320 Million and is scheduled for completion in April, 2013. The second phase of CISF induction with an additional 80 personnel is expected to take place by September, 2012. The remaining CISF manpower will be inducted after completion of CISF Township.

### 13.2 CCTV Surveillance

The refinery is under surveillance of state-of-the art CCTV Network designed to cover all the access control gates and other strategic locations.

### 13.3 Access Control

Access to refinery area is controlled by computerised Smart Card & Manual Pass system for contract labourers and RFID smart card for employees. Access control to the refinery area is being improved by completion of the proposed new refinery gate and security building. The security building will be equipped with multi-zone metal detectors and X-ray baggage scanners. This gate will also have turnstiles controlled through bio-metric card readers for strict access control to refinery area. Anti-vehicle intrusion systems like Tyre Rippers are also being planned to be installed at refinery gates. Marketing operation and security infrastructure is being built in the lower plateau of the Refinery.

### 13.4 IB Recommendations

A team from Industrial Security Branch of Intelligence Bureau (IB) visits the refinery of your company once in every two years to inspect security arrangements, identify grey area and recommend / suggest improvements. All the recommendations given by the IB in the year 2008 have been complied. The last IB inspection was carried out during December, 2010 and out of 30 Recommendations, majority have been complied. The remaining recommendations are under varying stages of compliance.

### 13.5 Security Audit by ONGC

Chief of Security, Oil and Natural Gas Corporation (ONGC), carries out periodical review of security of the refinery besides periodical security audits, and recommends for improvement which are implemented.



### 13.6 Mock Drills

A "Protection Scheme" to safeguard the refinery of your company from the events of strike, law & order situation have been finalized with the district Commissioner and Police Commissioner, Mangalore. Regular security mock drills and district level security exercises are conducted jointly with State Police and Coast Guards. Your company is actively involved in the coastal security exercises conducted at the coastal area jointly with Coast Guard.

### 14. CORPORATE SOCIAL RESPONSIBILITY (CSR) INITIATIVES

Your company's CSR initiative continues to be influenced by the needs and concerns of the community residing in the close proximity of the refinery.

The CSR initiative of your company known as "Samrakshan" have 5 areas with a vision to protect, preserve and promote people, peace and progress in and around of the refinery as under.

- Shikshana Samrakshan,
- Arogya Samrakshan
- Bahujan Samrakshan
- Prakrithi Samrakshan
- Sanskrithi Samrakshan

With these objectives, your company has implemented number of CSR schemes during the year. The major schemes covered under the CSR activities during the year includes construction of community hall, Road asphaltting, mid-day meal to school students, construction of school building, toilet blocks for schools, scholarship for meritorious students including SC/ST students, add on facilities to SC/ST community, self employment training for women, free distribution of sewing machines to women, construction of Anganwadi, artificial limb camp, mega medical camp and running a free primary health centre.

The main thrust areas where your company has taken various initiatives are in line with DPE guidelines and has spent ₹ 240 Million in various CSR schemes during last 4 years.

### 15. DIRECTORS

During the year following changes took place in Board of Directors of your company:

- 15.1 I, Shri Sudhir Vasudeva took over as Chairman of your Company from 03/10/2011.
- 15.2 Shri Vishnu Agrawal has assumed the office of Director (Finance) with effect from 01/04/2011 pursuant to his appointment as Director (Finance) of MRPL by the Ministry of Petroleum & Natural Gas (MoP&NG), Government of India.
- 15.3 Shri D.K.Sarraf has resigned on 16/09/2011 from the Board consequent upon his appointment as Managing Director of ONGC Videsh Limited (OVL).
- 15.4 The nomination of Shri A.K.Hazarika, and Shri K.S.Jamestin, was withdrawn by ONGC the parent company with effect from 31/10/2011 for optimizing the strength of the Board in compliance with Clause 3.1.3 of the mandatory guidelines of corporate governance for Central Public Sector Enterprises (CPSE) issued by Department of Public Enterprises (DPE), Government of India. Shri A.K.Hazarika and Shri K.S.Jamestin are continuing as special invitees on the Board of the company.
- 15.5 Shri U.K. Basu, Former Managing Director superannuated from the services of MRPL on 30/06/2012 and resigned from the Board of the company with effect from 01/07/2012.
- 15.6 Shri P.P. Upadhyay, has assumed the office of Managing Director with additional charge of Director (Technical) MRPL w.e.f. 01/07/2012, pursuant to his appointment as Managing Director and additional charge of Director (Technical) of MRPL by the Ministry of Petroleum & Natural Gas (MoP&NG), Government of India.
- 15.7 The Board wishes to place on records its appreciation for the services rendered by Shri U.K. Basu as Managing Director and Shri D.K.Sarraf as Director during their tenure on the Board of the Company.
- 15.8 In accordance with the provisions of the Companies Act, 1956 and Articles of Association of the Company, Dr. A.K. Rath will retire by rotation at the 24<sup>th</sup> Annual General Meeting of the Company. Dr. A.K. Rath, being eligible, offers himself for re-appointment as Director of the company.

15.9 Dr. D.Chandrasekharam was nominated by ONGC pursuant to clause 6.1 of the guidelines on corporate governance for CPSEs and was appointed as an additional Director with effect from 10/01/2012 by the Board of Directors who vacates his office as Additional Director and being eligible offers himself for re-appointment as a Director in the 24<sup>th</sup> Annual General Meeting.

15.10 Brief resume of the Directors seeking appointment / re-appointment, together with the nature of their expertise in specific functional areas, the names of the companies in which they hold the directorship and the membership / chairmanship of committees of the Board, and their shareholding in the Company are furnished in the Annexure to the AGM notice.

15.11 Your Company has complied with all the mandatory provisions of clause 49 of the Listing Agreement relating to the corporate governance requirements and mandatory guidelines on corporate governance for CPSEs issued by Department of Public Enterprise (DPE), Government of India except having requisite number of Independent Directors on the Board of the Company. There are three Independent Directors on the Board of your company constituting 1/3<sup>rd</sup> of its strength. The company is pursuing with Ministry of Petroleum and Natural Gas (MoP&NG), Government of India for appointment of requisite number of Independent Directors. The Annual Report contains a separate section on corporate governance, which forms part of this report.

### 16. DIRECTORS' RESPONSIBILITY STATEMENT

Pursuant to the requirement under section 217 (2AA) of the Companies Act, 1956, with respect to Directors' responsibility statement, it is hereby confirmed that:

- i) In the preparation of the Annual Accounts, the applicable accounting standards have been followed and that there are no material departures from the same.
- ii) The Directors have selected such accounting policies and applied them consistently and made judgments and estimates that are reasonable and prudent, so as to give a true and fair view of the state of affairs of the company as at 31<sup>st</sup> March, 2012 and the Profit & Loss of the company for the year ended on that date.
- iii) The Directors have taken proper and sufficient care for the maintenance of adequate accounting records in accordance with the provisions of the Companies Act, 1956, for safeguarding the assets of the company and for preventing and detecting fraud and other irregularities, and
- iv) The Directors have prepared the Annual Accounts of the Company on a "going concern" basis.

### 17. FIXED DEPOSIT

Your Company has not accepted any fixed deposit during the year from the public.

### 18. CORPORATE GOVERNANCE

- 18.1 Your Company has complied with all the mandatory provisions of Clause 49 of the Listing Agreement relating to the corporate governance requirements and mandatory guidelines on corporate governance for CPSEs issued by DPE, Government of India except having requisite number of Independent Directors on the Board of the Company. There are three Independent Directors on the Board of your company constituting 1/3<sup>rd</sup> of its strength. The company is pursuing with Ministry of Petroleum and Natural Gas (MoP&NG), Government of India for appointment of requisite number of Independent Directors.
- 18.2 The Annual Report contains a separate section on Corporate Governance, which forms part of this report.
- 18.3 Your Company is listed with the Bombay Stock Exchange Limited and National Stock Exchange Limited.
- 18.4 Pursuant to Clause 49 of the Listing Agreement with Stock Exchanges, your Company has obtained the Certificate from the Joint Statutory Auditors of the Company, for Compliance of Corporate Governance which is annexed to and forms part of this report.
- 18.5 As a measure of good corporate governance, your Company has engaged M/s Ullas Kumar Melinamogaru & Associates Practicing Company Secretaries for conducting Annual Secretarial Compliance Audit for the year 2011-2012. M/s. Ullas Kumar Melinamogaru & Associates, Practicing Company Secretaries have issued Annual Secretarial Compliance Audit Report for the year 2011-12 which forms part of this report.



# Mangalore Refinery and Petrochemicals Limited

18.6 Chairman speech at the 24<sup>th</sup> Annual General Meeting (AGM) will be distributed to shareholders during the meeting and will be published in the leading news papers.

18.7 Your Company has despatched a copy of Annual Report consisting of Directors Report, Auditors Report, Balance Sheet and Profit & Loss Statement and other documents as required to be sent under the provisions of Companies Act 1956 to all, its members as on the records date i.e. 13.07.2012 pursuant to Section 219 and the Companies Act, 1956.

## 19. MANAGEMENT DISCUSSION AND ANALYSIS REPORT

In terms of Clause 49 (IV) (F) of the Listing Agreement with the Stock Exchanges, the Management Discussion and Analysis Report have been attached and forms part of this report.

## 20. AUDITORS

20.1 M/s. Maharaj N. R. Suresh & Co., Chennai and M/s. Gopalaiyer and Subramanian, Coimbatore have been appointed as joint Statutory Auditors of the Company for the Financial Year 2011-12 by Comptroller & Auditor General of India (C&AG).

20.2 The report of the C&AG at Annexure III forms part of this Report.

20.3 Particulars of the Cost Auditor for the financial year 2011-12

- M/s. Musib and Associates, Cost Accountants has been appointed as Cost Auditor for the year 2011-12.
- Cost Audit report for the year 2011-12 will be filed before the due date i.e. 27/09/2011.

## 21. ACKNOWLEDGEMENT

21.1 Your Directors sincerely thank the Government of India (GoI), Ministry of Petroleum and Natural Gas (MoP&NG), Ministry of Finance (MoF), Ministry of Corporate Affairs (MCA), Department of Public Enterprise (DPE), Ministry of Environment and Forest (MoEF), Ministry of External Affairs (MEA), Ministry of Shipping (MoS), Ministry of Home Affairs (MHA) other Ministries and Departments of the Central Government and the Government of Karnataka, for their valuable support, guidance and continued co-operation.

21.2 Your Directors gratefully acknowledge support and direction provided by the parent company, Oil and Natural Gas Corporation Limited (ONGC) and the support of Hindustan Petroleum Corporation Limited (HPCL), as Promoters of the company.

21.3 Your Directors wish to thank the shareholders for the continued confidence reposed on their Company.

21.4 Your Directors acknowledge the continuing co-operation and support received from New Mangalore Port Trust, Financial Institutions, Banks and all other stakeholders such as suppliers of crude oil, vendors, contractors, transporters.

21.5 Your Directors recognize the patronage extended by the valued customers for the products of the company and promise to provide them the best satisfaction.

21.6 Your Directors wish to place on record their sincere appreciation of the sustained and dedicated efforts put in by all the employees collectively and concertedly as a Team known as "Team MRPL".

For and on behalf of the Board

(Sudhir Vasudeva)  
Chairman

Place : New Delhi  
Date : 3<sup>rd</sup> August, 2012

## ANNEXURE- I TO THE DIRECTOR'S REPORT

### A. CONSERVATION OF ENERGY

Your company continued its emphasis on energy conservation through operational optimization, continuous monitoring and implementation of several energy conservation schemes

- Major energy conservation measures taken during the year
  - Additional interconnection between Phase-1 & Phase-2 Low Pressure steam headers for better steam distribution & minimizing intermittent LP steam venting.
  - Ceramic coating carried out for VBU-1, HCU-1 heaters, which resulted in lesser Specific Fuel consumptions.
  - CDU-1 and VDU-1 heaters provided with Refractory Modules for better heat recovery.
  - Online chemical cleaning of CDU-1, VDU-1 and VDU-2 furnaces were carried out. This resulted in better heat recovery and also helped in increasing throughputs in both units.
  - Adsorbents of PSA unit were changed in Hydrogen Generation Unit-1 which improved Hydrogen recovery in this unit.
  - Steam Condensate Recovery schemes implemented in CDU-1 and CDU - 2 units.
- Additional investments and proposals, if any, being implemented/ under consideration for reduction of consumption of energy / resources
  - Repair & Maintenance of steam lines insulation and steam traps.
  - Steam Condensate Recovery in VBU-I and HCU-1 units.
  - Slop recycling provision with coalescer in CDU-1 & VBU-2 units.
  - Replacing CDU2 Air Pre-Heater for better heat recovery from flue gas.
- The measures (a) above resulted in energy consumption reduction by approx 6200 MT/Year, equivalent to a net saving of approx. ₹ 206 Million/year, with an investment of approximately ₹ 133 Million.

- Fuel & Loss in the refinery for the year 2011-12 was 6.75%, whereas it was 6.85% in 2010-11. The refinery achieved the lowest ever energy index (MBTU/ BBL/NRGF) of 57.92 for the year 2011-12, improving upon the previous best of 58.13 for the year 2010-11.

### MRPL's Energy performance during the last four years is as follows

Year	Crude throughput, MMTPA (Net Crude Basis)	Complexity, NRGF (CHT method)	Energy Index, MBN (MBTU/Bbl/ NRGF)
2011-12	12.818	5.487	57.92 *
2010-11	12.639	5.585	58.13
2009-10	12.497	5.371	58.27
2008-09	12.586	5.277	59.07

\*Excluding – Phase-III

### FORM – A

Total Energy consumption and Energy consumption per unit of production:

A)	Power and Fuel Consumption	Current Year 2011-12	Previous year 2010-11
1	Electricity		
a)	Purchased		
	Unit (Million KWH)	20.75	19.52
	Total Amount (₹ Million)	118.99	114.76
	Rate / Unit (₹ /KWH) *	5.73	5.88

\* Includes demand charges of ₹13.18 Million (₹ 18.58 Million for 2010-11)

The unit cost per KWH excluding Demand charges is ₹ 5.10 (₹ 4.90 for 2010-11)

A)	Power and Fuel Consumption	Current Year 2011-12	Previous year 2010-11
b)	Own Generation		
i)	Through Diesel Generator (at Sarpady)		
	Unit (Million KWH)	0.10	0.08
	Unit per ltr. of Diesel (KWH/ltr.)	2.99	3.27
	Cost / Unit (₹ /KWH)	16.02	10.71
ii)	Through Steam turbine generator		
	Unit (Million KWH)	612.01	613.89
	Unit per liter of Fuel Oil (KWH/ltr) *	1.99	1.99
	Cost / Unit (₹ /KWH) *	16.18	11.8
	* Includes co generated Steam cost		
2	Fuel Oil		
	Quantity (MT) (Oil + Gas)	8,21,224	8,23,185
	Total Amount (₹ In Million)	27,649.37	20,226.67
	Average Rate (₹ /MT)	33,668.49	24,571.24
3	Others / Internal Generation		
	Diesel (at Sarapady)		
	Quantity (KL)	33.09	22.99
	Total Cost (₹ Million)	1.59	0.8
	Rate (₹ /KL)	47,911	34,990
4	Consumption per unit production		
	Total crude processed (TPA)	1,28,17,590	1,26,38,942
	Total Fuel Consumed (TPA) (includes fuel and loss)	8,65,043	8,66,087
	Total Electricity (Million KWH) (after deducting external supply)	632.76	627.7
	Fuel Consumption, MT/ MT of Crude processed (%)	6.75	6.85
	Electricity Consumption, KWH / MT of Crude processed	49.37	49.66

### FORM - B

#### A) Research and Development (R&D)

##### 1. Specific Areas in which R&D carried out by the company 2011-2012:

###### • Crude Assay

Crude Assay was carried out using TBP apparatus:

Azari  
Aseng  
Anton  
Agbami

###### • Experiment on Polymer Modified Bitumen:

Experiments were carried out to study the stability of polymer modified Bitumen with various polymers and developed a formulation for Styrene-Butadiene polymer modified Bitumen.

###### • Experiments on method development using Ion chromatography

Experiments were carried out on spent caustic and a method developed for the determination of sulphate and thiosulphate content by using Ion chromatography.

###### • Additives Evaluation

Additives were evaluated for improving the Diesel Lubricity and H<sub>2</sub>S Scavenging in export grade fuel oil.

###### • Ground water analysis

Experiments were carried out to assess the trace metal levels in ground water samples collected from bore-wells in and around the refinery.

#### 2. Benefits derived as a result of the above R&D

- Assay of various crude helped operation to optimize unit-operating conditions to maximize product yield and product quality.
- Experiments on polymer modified bitumen has helped to make value added products form Bitumen.
- Additive evaluation has helped operation units to optimize the dosage levels
- Ground water trace metal analysis has helped to develop a base line data on trace metals in refinery area.

#### 3. Future plan of Action

- To develop a formulation for bitumen emulsion.
- To study corrosion and efficiency of corrosion inhibitor using Potentiostat – Galvanostat Instrument.
- Study on FCC catalyst.

#### 4. Expenditure on R&D

- Capital : ₹ 11.25 Million
- Recurring : ₹ 2.91 Millions
- Total : ₹ 14.16 Millions

#### B) Technology Absorption, Adaptation & Innovation

- i) Efforts, in brief, made towards technology absorption, adaptation and innovation.

- Technologies for process units of Phase-1 & 2 have been fully absorbed.
- CDU1 unit has been revamped with pre-flash column to enhance unit capacity from 3.69 to 4.8 MMTPA without changing the furnace duty. The revamped unit was commissioned in October 2011.
- HCU1 unit has been revamped for enabling once-through mode operation to feed upcoming PFCC unit in Phase-III. The revamped unit was re-commissioned in October 2011.
- Gas Oil Hydro De-sulphurisation (GOHDS) unit capacity revamp completed during April, 2010 has improved the Refinery capability of producing Euro-III & Euro-IV grade Diesel.

- ii) Benefits derived as a result of the above efforts, e.g., product improvement, cost reduction, product development, import substitution, etc.

Refinery throughput sustained at 12.818 MMTPA while meeting clean fuel specifications, which required higher complexity operations.

GOHDS unit capacity revamp has improved the Refinery capability of producing Euro – III & Euro-IV grade Diesel.

- iii) In case of imported technology (imported during last 5 years reckoned from the beginning of the financial year), following information is furnished.

- Technology imported  
GOHDS unit capacity revamp, HCU-1 revamp to once-through mode
- Year of import  
2008-09, 2010-11
- Has technology been fully absorbed?  
Yes.
- If not fully absorbed, areas where this has not taken place, reasons therefore and future plans of action.  
Not applicable.

#### C) FOREIGN EXCHANGE EARNINGS AND OUTGO

(₹ In Millions)

	Financial Year 2011- 2012	Financial Year 2010- 2011
Foreign Exchange Earnings –		
a) FOB value of exports	234,183.24	146,024.71
b) Deputation of specialist	-	6.87
Foreign Exchange Outgo	478,058.81	307,362.34