

CHAPTER-I

PARTICULARS OF ORGANISATION, ITS FUNCTIONS AND DUTIES

A) Particulars of organization

a) MRPL – A Profile

Mangalore Refinery and Petrochemicals Limited (MRPL) operates a grass root refinery with a capacity of 9.69 MMTPA, at Mangalore, on the West Coast in the ever-green Dakshina Kannada District, about 350 Kms., from Bangalore. The refinery's first phase of 3.69 MMTPA was commissioned in March 1996 and the second phase of 6.00 MMTPA in September 1999.

MRPL was originally setup as a Joint Venture refinery, promoted by Hindustan Petroleum Corporation Ltd (HPCL) and the Aditya Birla Group of Companies, pursuant to an MOU entered into amongst Govt. of India, HPCL and Indian Rayon (Aditya Birla Group of Companies). In March 2003, Oil and Natural Gas Corporation Ltd. (ONGC) acquired the total share holding of A. V. Birla Group and infused additional equity, thus making MRPL a majority held (71.6%) subsidiary of ONGC.

The refinery has one of the most modern and state-of-the-art technologies from reputed licensors.

- b) Date of incorporation : 2nd August 1988.
- c) Mode of incorporation : Incorporated as a Public Limited Company under the Companies Act, 1956.
- d) Subsidiary of : Oil & Natural Gas Corporation Limited.
- e) Category of Company : Government Company under section 617 The Companies Act, 1956
- f) Listing with Stock Exchanges : The equity shares of the Company are presently listed with the following stock exchanges
- i) Bombay Stock Exchange Limited. Mumbai
 - ii) The National Stock Exchange of India Ltd.

- g) Share Capital As on 31st March 2008.
- i) Authorized Capital : 1,900,000,000 Equity Shares of Rs.10/- Each 100,000,000 Non-Cumulative Redeemable Preference Shares of Rs.10/- Each.
 - ii) Subscribed, issued & paid-up capital : 1,752,902,327 Equity Shares of Rs.10/- Each 9,186,242 Non-Cumulative Redeemable Preference Shares of Rs.10/- Each.
- h) Details of manufacturing facilities : The Refinery was setup in 2 phases. Phase 1 with a name plate capacity of 3.69 MMTPA and Phase 2 with a name plate capacity of 6 MMTPA. Brief details of various critical units are given under.

Atmospheric and Vacuum Distillation Unit

The Atmospheric and Vacuum Distillation Units along with Naphtha Splitter Unit, designed by Engineers India Limited (EIL) A Govt. of India Company, are heat integrated to achieve high energy efficiency, reducing fuel oil consumption, thereby reducing air emissions.

Hydrocracker Unit (Technology: UOP, USA)

The Hydrocracker Unit, produces high quality sulphur-free products. The plant is designed for 100% conversion of heavy, low value vacuum gas oils, to lighter and valuable products. Diesel from Hydrocracker Unit has a high Cetane number, which facilitates the production of Euro III and Euro IV grade high speed diesel oil.

Gas Oil Desulphurisation Unit (GOHDS)

This unit is designed to produce diesel with that conforms to BS II and BS III specifications.

CCR Platformer Unit (Technology: UOP, USA)

The Continuous Catalytic Regeneration type Platforming Unit (CCR) produces lead-free, high octane motor spirit (petrol). Hydrogen produced as a by-product, is used in the Hydrocracker Unit. Reformate with upto RON 110 is also exported for production of premium grade petrol and also for extraction of p-Xylene, a high value aromatic component, used in the production of PTA and Polyester.

Visbreaker Unit (Technology: Shell/ABB Lummus, Holland)

Shell Soaker Visbreaker technology, licensed by ABB Lummus of Holland, has been adopted to upgrade heavy vacuum residue to Naphtha and Gas Oil. This is the first unit in India to have Vacuum Flash column, producing Vacuum Gas Oil, which is used for supplementing the feed stock to Hydrocracker Unit.

Hydrogen (Technology: KTI, Holland)

The Hydrogen Plants designed by M/s KTI, Holland produce Hydrogen by steam Reforming of Naphtha. Hydrogen purity of 99.9% is achieved through UOP-Pressure Swing Adsorption (PSA) Unit.

Sulphur Recovery Unit (Technology: KTI, Italy)

MRPL has three SRUs, one being a stand-by unit. These units designed by KTI, produce Sulphur with 99.99% purity, with a recovery of more than 99%. It has a unique Tailgas Treatment Section, BSR-Selectox, licensed by UOP.

Bitumen (Technology: M/s. Porner, Austria)

The main Bitumen Blowing Reactor designed by M/s. Porner of Austria is capable of producing various paving grades of Bitumen.

New Units commissioned in 2006:

- Light Naphtha Isomerization unit: Technology from M/s UOP. The unit processes light naphtha streams and converts it into sulphur free, non-aromatic with zero benzene MS blend stock.
- Mixed Xylene Unit: Designed and constructed by M/s Technip India. The plant produces mixed xylene product from heavy reformat stream of CCR unit.

- i) Infrastructure facilities : MRPL has -
- 2 Dedicated Oil Jetties at New Mangalore Port Trust, capable of handling 92,000

DWT ships, with 14 M draft.
Total capacity of jetties is over 16 MMTPA.

- Captive Power Plant – installed capacity 118.5 MW with 5 steam Turbo-Generators and 7 Boilers. Fuel used is Low Sulphur Heavy Stock (LSHS).
- Raw Water required for the refinery is transported through a 43 km long pipeline from the perennial river on Nethravathi. A weir has been built by MRPL at Sarpady on the river.

j) Major Raw Materials

Crude oil is the main raw material for Refinery.

MRPL has the unique distinction of having processed 38 different types of crudes, sourced from West Africa, Saudi Arabia, Kuwait, Iraq, Iran, Sudan, Qatar, Abu Dhabi, Dubai; Yemen, Kazakhstan, China, Vietnam, Malaysia, Indonesia, Brunei and India (Mumbai High). Presently, two sweet crudes Mumbai High and Nile Blend (Sudan) are being regularly processed, in addition to sour crudes, which are mainly sourced from Middle east.

B) Nature of Business

MRPL has been established to carry out the objectives specified in the Memorandum & Articles of Association of the Company. The main activities of MRPL are refining of crude oil and producing and marketing value added petroleum and petrochemical products.

The major products produced from the refinery are LPG, Naphtha, Motor Spirit (Petrol), Reformate, Kerosene, Aviation Turbine Fuel, High Speed Diesel (HSD), Fuel Oil, Bitumen (Bulk and packed), Sulphur.

MRPL does its business operation within the objectives specified in the Memorandum & Articles of Association in a most fair and transparent manner. MRPL also endeavors to protect interest of its stakeholders as well as to maximize the value of the shareholders.

C) Road ahead

The details of major projects being implemented are given under the section “Other Information”.

Projects for value addition namely Mixed Xylenes, Petrochemicals, marketing infrastructure and retail outlets are under various stages of completion.