Information related to SWM Project

Refuse Transfer Station and Landfill Management:

Introduction

Refuse Transfer Station

Gorai Dumping Ground

Deonar Dumping Ground

Mulund Dumping Ground

Kanjur Landfill Site

Introduction:

Mumbai, the financial capital of india produces on an average 9000 tonnes of Municipal Solid Waste per day. Municipal Corporation of Greater Mumbai is the agency responsible for Solid Waste Management (SWM) in the city.

Presently, there are four Refuse Transfer Stations viz. Mahalaxmi Refuse Transfer Station, Kurla Refuse Transfer Station, Versova Lagoon Transfer Station & Gorai Refuse Transfer Station and three dumping grounds viz. Deonar Dumping Ground, Mulund Dumping Ground & Kanjur Landfill site. Gorai Dumping Ground is scientfically closed and Gorai project is dedicated to Mumbai city on 18th August 2009 at the hands of then Hon. Minister, MoUD, GoI, Shri. Dr. Jaipal Reddy.

Refuse Transfer Station:

At present, there are four Refuse Transfer Stations viz. Mahalaxmi Refuse Transfer Station, Kurla Refuse Transfer Station, Versova Lagoon Transfer Station & Gorai Refuse Transfer Station the MSW collected from nearby MCGM wards through small refuse vehicles are unloaded at Refuse Transfer Station and the said MSW is loaded in Big Close body Refuse vehicles and transported to Dumping Grounds / Landfill site for final disposal.

a. Mahalaxmi Refuse Transfer Station: It is having area of approx. 14700 sq.mt. with modernized machinery and MSW of approx. 750 MT is handled daily.
b. Kurla Refuse Transfer Station: It is having area of approx. 3000 sq.mt. and MSW of approx. 700 MT is handled daily.
c. Versova Lagoon Transfer Station: It is having area of approx. 8000 sq.mt. and MSW of approx. 400 MT is handled daily.
d. Gorai Refuse Transfer Station: It is having area of approx. 10000 sq.mt. and MSW of approx. 500 MT is handled daily.

Gorai Dumping Ground:

Operating since 1972, spreads over an area around 19.6 Ha located in Western Suburbs of Mumbai. Site was receiving Municipal Solid Waste (MSW) till 2007, which was discontinued thereafter as per directives of Hon. Supreme Court. Around 2.34 Million MT waste was accumulated at the dumpsite till the work of scientific closure started. Work of scientific closure of Gorai dumpsite was started in 2008 and the same was completed in 2009 in accordance with MSW Rules 2000.

The Scientific Closure Plan included the following components:

a) Relocation & Reformation of existing waste – Haphazardly dumped waste was shifted within the footprint area and it was compacted & reformed creating waste profiles as per design.
b) Covering of reformed slopes & plain area with liner system & then with soil.
c) Liner system comprises of Geo-Textile liner, HDPE (High Density Poly Ethylene) liner & Geo-Composite liner.
d) Landscaping – Greenery was developed over the capped area.
e) Surface water drainage for channelling the storm water.
f) Construction of compound wall, Sheet piling on the creek side to prevent leachate from entering the creek
g) Installation of Landfill Gas (LFG) collection & leachate collection system.
h) Installation of LFG flaring system.

Gorai Project dedicated to Mumbai city on 18th August 2009 at the hands of then Hon. Minister, MoUD, GoI, Shri. Dr. Jaipal Reddy.

Project Benefits :-

- Quality of life of people of Gorai improved.
- Quality of marine life improved.
- Market value of property in the area increased resulting in increases in property tax collection to MCGM.
- Fishermen's income increased because of better marine environment.
- Mangroves got rejuvenated resulting in healthy biodiversity in this region
- 19 Ha. of green lung added to the City of Mumbai.
- Green House Gases (GHG) emission stopped resulting in reducing carbon foot prints in the city.
- Prevention in occurrence of problem like foul odour, fire, health hazards & breeding of flies & rodents.

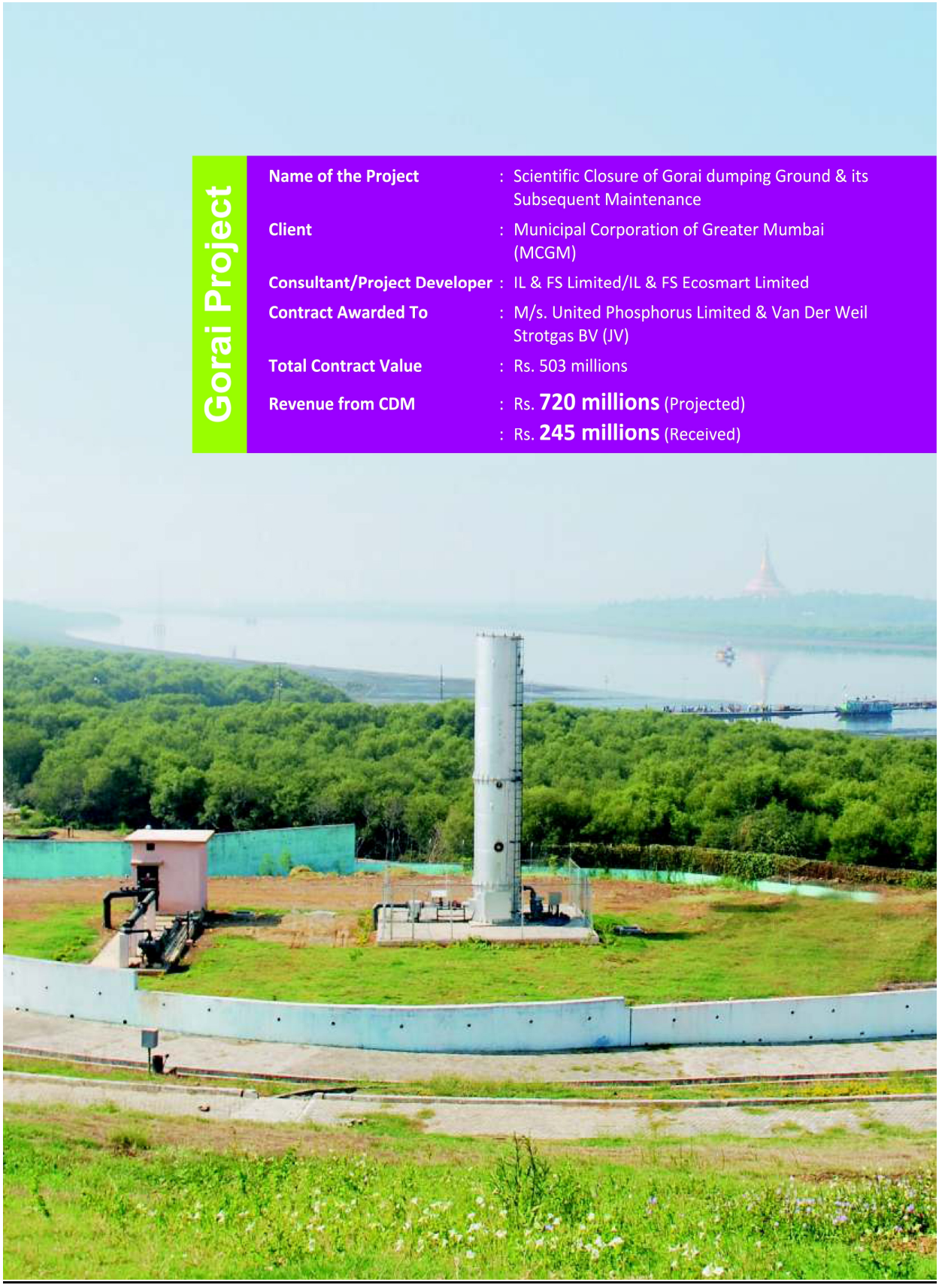
Project is successfully registered under Clean Development Mechanism (CDM) of United Nations Framework Convention on Climate Change (UNFCCC) on 10th February 2010.

Gorai Project : Stepwise Developments

As on Aug. 2008

As on Jan. 2009

As on June 2009



Deonar Dumping Ground:

The largest and the oldest dumping ground of Mumbai operating Since 1927.

The site is situated in the Eastern Suburbs of the City, adjacent to Thane creek, in an area of about 132 ha. of land. It is surrounded by creek on three sides and a slum on the fourth side.

At present, daily fresh MSW of an average 3200-3500 TPD and ward debris of an average 700-900 TPD & debris from various Municipal deptt. of an average 1000-1200 TPD is received at Deonar Dumping Ground. The debris received at Deonar Dumping Ground is used for daily covering and preparing loop roads inside dump.

In view of recent fire incident at Deonar Dumping Ground, MCGM has appointed IIT, Mumbai for giving proposal regarding slope stabilization, identifying area for closure, estimating volume of methane, design of final cover, design landfill gas collection and leachate management system. On receipt of the same further course of action will be decided by MCGM.

As a part of long term measures, a tender for Waste to Energy project for processing 3000 MT MSW per day is invited by MCGM.

Mulund Dumping Ground:

Mulund Dumping Ground is situated in the eastern suburb of the City in an area of about 25 ha. along the Thane creek and operating since 1968.

At present, daily fresh MSW of an average 2400 TPD and debris of an average 550 TPD is received at Mulund Dumping Ground.

E-tender for recovery of land at Mulund Dumping Ground by adopting suitable technology is in process.

Kanjur Landfill Site:

In year 2005 land at Kanjur was handed over to MCGM by GoM, as per the directions of Hon. Supreme Court.

In year 2007 MCGM has initiated Integrated Solid Waste Management (ISWM) Project to comply Municipal Solid Waste (Management & Handling) Rules, 2000 passed by Ministry of Environment & Forest (MoEF).

The work of design, construction, operation and maintenance of integrated waste management facilities on Design, Build, Own, Operate and Transfer (DBOOT) basis at Kanjur Village, Mumbai is entrusted to M/s Antony Lara Enviro Solutions Pvt. Ltd. Vide SCR No. 403 dtd. 06.07.2009 for the period of 25 years.

Kanjur Project has received Authorization from Maharashtra Pollution Control Board (MPCB) on 30.03.2012 to process 1000 TPD of MSW by windrow composting and 3000 TPD of MSW by way of bioreactor technology. Further, MPCB amended the authorization and allowed

MCGM to process 1000 TPD of MSW by windrow composting and 3000 - 6500 TPD of MSW by way of bioreactor technology. Also Kanjur Project has received revised environemtnt clearance (EC) to process 1000 TPD of MSW by windrow composting and 3000 to 6500 TPD of MSW by way of bioreactor technology on 5.12.2014 from State Level Environment Impact Assessment Authority (SEIAA).

Operator of Kanjur Project i.e. M/s. Antony Lara Enviro Solutions Pvt. Ltd. is receiving and processing about 3000 TPD of MSW in Bioreactor Landfill and 1000 TPD of MSW shall be processed by windrow composting and the work of construction of windrow compost plant along with material recovery facility (MRF) at site is in process. The commissioning of compost plant is expected in Jan 2017.

As per the conditions stipulated in Environment Clearance, the operator has monitoring various Environmental aspects through MoEF approved laboratory. In order to cross check the monitoring being done by the operator, MCGM has appointed National Environmental Engineering Research Institute (NEERI) to monitor environment related aspects for Kanjur Landfill Project and to suggest the remedies for the same if any.

MCGM is using Kanjur site for scientific processing of MSW in accordance with the aforesaid permissions given by various competent authorities and MCGM is taking all efforts to safeguard the environment and health of public residing nearby Kanjur Landfill Site.