

EXECUTIVE SUMMARY

INTRODUCTION OF PROJECT

M/s. Kalyan-Dombivli Municipal Corporation (KDMC) is having their own CBWTF since year 2003 at Survey No. 58/3, Adharwadi Jail Road, Umberde Gaon, Kalyan (West), Maharashtra-421301 and operated the facility on contract basis. M/s. KDMC has also carried out repairing work of existing facility to run the plant efficiently. This site is located outside the notified industrial area. Now, KDMC is interested for expansion in existing common bio-medical waste treatment and disposal facility with increasing in capacity of Incinerator, Autoclave and Shredder at their existing premises.

The existing CBWTF facility of KDMC is already collecting waste from KDMC municipal area from various hospitals and clinics. The proposed expansion of CBWTF will collect and treat bio-medical waste generated from the various Hospitals, Medical Institutes, Dispensaries & Clinics, Clinical Laboratories etc. located in Kalyan-Dombivli Municipal Corporation area and its surrounding area viz. Kalyan (W), Kalyan (E), Dombivli (W), Dombivli (E), Bhiwandi, Ullhas Nagar, Badlapur, Ambernath, Shahpur, Padgha, Murbad etc.

PROJECT DETAILS

Name of the company	M/s. Kalyan-Dombivli Municipal Corporation				
Capacity of the project	Sr. No	Facility	Capacity		Total
			Existing	Proposed	
	1	Incinerator	100 kg/hr. (1 No)	100 kg/hr. (1 No)	200 kg/hr. (2 No)
	2	Autoclave	50 lit/cycle (1 No)	50 lit/cycle (1 No)	100 lit/cycle (2 No)
3	Shredder	50 kg/hr (1 No)	50 kg/hr (1 No)	100 kg/hr (2 No)	
Total project cost	2.74 Crores				
Cost for EPCM	45.0 Lacs				
Cost for CSR activity	Rs. 6.9 lacs shall be utilized over a period of 5 years.				

PROJECT REQUIREMENT:

Land requirement	4200 m ² land is already available.
Water requirement & its source	Total 20 KLD (10 KLD existing and 10 KLD proposed) water will be required after proposed expansion and will be sourced from ground water through open well.
Electricity requirement & its source	Estimated power requirement after proposed expansion will be 200 kW (100 kW existing and 100 kW proposed) which shall be sourced from MSEB.
Manpower requirements	M/s. KDMC is having 15 personnel to operate existing facility and will proposes 10 more personnel to operate proposed expansion. Total nos. of manpower shall be 25 personnel after proposed expansion.
Fuel requirement & its source	Total 33 lit/hr LDO/Diesel is required after proposed expansion which shall be procured from local market.
D.G. set for emergency use	One existing D. G. Sets of 150 KVA and proposed one DG Set of 62.5 KVA Capacity.

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WASTE WATER GENERATION

Entire waste water generated from the facility will be treated through ETP and treated water will be reused for the development of green belt, toilet flushing, vehicle washing etc. hence zero discharge concept shall be followed.

AIR EMISSION & AIR POLLUTION CONTROL MEASURES

Air emission from the facility would be PM, SO₂, NO_x and HCl from incinerator stacks. One Venturi scrubber is already installed at existing incinerator stack. One more venturi scrubber will be proposed as pollution control device at proposed incinerator stack to control the air emissions.

SOLID/HAZARDUS WASTE GENERATION & DISPOSAL

Incineration ash, used oil and ETP sludge will be generated from the facility. Used oil will be re-used as a lubricant in the machineries within the premises only. ETP sludge and incineration ash will be collected, stored and safely transported to authorized TSDF site.

BASELINE ENVIRONMENT

The baseline environmental quality of Air, water, soil, noise, socio-economic status and ecology has been assessed in the period of 1st March to 31st May, 2016 in a study area of 10 km radial distance from the project site.

The ambient air quality monitoring was carried at eight locations to monitor the concentration of PM₁₀, PM_{2.5}, SO₂ NO_x and CO.

Total five nos. of ground water and 3 nos. of surface water samples were collected from the study area. The result of the all water samples collected were shows that the water quality of the area is good. Values of the parameters found within the permissible limit of Indian standards/specifications for drinking water IS: 10500-1991.

Background noise levels were measured at 8 locations. Noise levels found within norms at all the locations.

Land use within 10 km radius of the study area has been determined with the help of satellite imagery, and broadly consists of settlements, Crop land, land with scrub and industrial area, and tank/river etc.

During the eco-biological study, endangered and endemic species is not observed in the stud area.

Kalyan and Dombivali city is one of the major urban areas and governed by Municipal Corporation which comes under Mumbai Metropolitan Region. As per Census 2011, population of Kalyan and Dombivali is 12,47,327. All the villages were having almost all the infrastructure facilities like, educational, drinking, sanitation, health, etc.

ENVIRONMENTAL IMPACTS DURING CONSTRUCTION PHASE

There will be minor reversible impact envisage on the air, water and noise environment during construction phase.

ENVIRONMENTAL IMPACT DURING OPERATION PHASE & MITIGATION MEASURES

Due to this proposed expansion project, there will be minor increment in the air pollution due to the air emissions like, PM, SO₂, NO_x and HCl from the stake attached to incinerator facility. Entire waste water generated from the facility will be reused for the green belt development and hence follow the zero discharge concept. Solid waste generated in the form of incineration ash, ETP Sludge and used oil will be disposed as per guidelines to reduce impacts on soil environment.

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ENVIRONMENTAL MONITORING PROGRAMME

A regular monitoring of the environmental parameters like air, water, noise and soil, etc. will be carried out periodically as recommended.

CORPORATE SOCIAL RESPONSIBILITY (CSR)

Funds to the extent of Rs. 6.9 lakhs (i.e. 2.5% of proposed expansion project cost) shall be earmarked for CSR activities, this fund shall be utilized over a period of 5 years.

ENVIRONMENTAL MANAGEMENT PLAN

The management team is very much concern about environmental issues. All the environmental components will be looked out by Environmental Management Cell (EMC). Mitigation of environmental impacts has to be implemented according to the suggestions and will be monitored regularly to prevent any lapse.

CONCLUSION

Kalyan-Dombivli Municipal Corporation has committed to implement all the pollution control measures to protect the surrounding environment. The project can definitely improve the regional, state and national economy and health status. Upcoming of such kind of facilities is an indication of socio economic development. The implementation of this project will definitely improve the physical and social infrastructure of the surrounding area.