



Parshvanath Charitable Trust's
A. P. SHAH INSTITUTE OF TECHNOLOGY
(Approved by AICTE New Delhi & Govt. of Maharashtra, Affiliated to University of Mumbai)
(Religious Jain Minority)

DEPARTMENT OF CIVIL ENGINEERING

SITE VISIT REPORT

Subject: - Solid and Hazardous Waste Management (SEM VII)

Site Visit Date: - 24-09-2022

Site: - Project Revitalization Samrath Bharat Vyaspeeth

TMC Sewage Treatment Plant

Site Address: - Project Revitalization, Samarth Bharat Vyaspeeth, TMC Sewage Treatment Plant, Near Nytro Gym., Kanhaya Nagar, Kopri, Thane East, 400603



As per the curriculum of University of Mumbai, students of final Year Civil Engineering have Elective IV subject – CEDLO7022 Solid and Hazardous Waste Management. A site visit was arranged to Project Revitalization Samrath Bharat Vyaspeeth, Kopri, Thane East to see and study solid waste management plant.

Samarth Bharat Vyaspeeth (SBV), a non-profit organization, and the Thane Municipal Corporation launched Project Revitalization in 2017 to send lesser waste to landfills and put it to some good use. The aim was to give the women rag pickers in the area a stable source of income and to collect dry waste from as many households as possible. Till date, they have employed nearly 24 women rag pickers and saved 30 tonnes of waste from ending up at landfills every day. SAMRATH BHARAT VYASPEETH NGO developed this plant as integrated waste management centre. The vision behind this is the business sector development

and helping the nature and environment to fight against the severe damage due to waste dumping.

During the site visit students studied how actually solid waste management is done on site. Waste management starts with segregation activity. At SBV's waste management centre, different types of waste such as dry waste, floral waste and garden waste are segregated at a single location.

Dry Waste collected from Thane region societies segregated manually by employed rag pickers. Segregated plastic is send for recycling. Segregated Papers and cardboards are compressed by compacting equipment in bundles and transported for recycling. The centre was able to expand its services, and now manages several types of waste segregation and recycling – of plastic to poly-fuel, garden waste to briquette, and flower waste to compost.

In this site visit, students have got the knowledge regarding –

- How waste segregation is done in actual practice? What are various practical difficulties faced? How to overcome these difficulties?
- Pyrolysis plant for plastic waste management
- Converting horticulture wastes into valuable energy product such as briquette
- Flower waste to compost

Remark :- PO1,PO2,PO3 ,PO4 and PO12 are covered.
PSO 1 and PSO3 are covered.

PO Covered	Justification
PO1	Students will be able to apply the knowledge of science, engineering fundamentals, and an engineering specialization for the solution of solid waste management.
PO2	Students will be able to apply natural sciences, and engineering sciences to solve solid waste management issues.
PO3	Students will be able to design solutions for the problems with appropriate considerations of public health and safety and environmental considerations.
PO 4	Students will be able to design experiments in the field of solid waste management.
PO12	Students will have the preparation and ability to engage in independent and life-long learning in the broadest context of technological change.

PSO Covered	Justification
PSO1	Students will be able to survey environmental engineering problems.
PSO3	Students will be able to work for public health and welfare along with maintaining sanitation.