

NITTE MEENAKSHI INSTITUTE OF TECHNOLOGY

(An Autonomous Institution Affiliated to VTU, Belgaum)

Accredited by NBA (AICTE), New Delhi

YELAHANKA, BANGALORE- 560 064



Project Report On

“DESIGN AND DEVELOPMENT OF SEGROPACTOR”

Submitted In partial fulfilment of the requirements for the award of degree of

BACHELOR OF ENGINEERING

In

MECHANICAL ENGINEERING

By

Mr. Vishwas K M

USN: 1NT11ME129

Mr. Mallikarjun L G

USN: 1NT12ME411

Mr. Amrit Nahata

USN: 1NT11ME059

Under The Guidance of

Mr. Prashanth N

Asst Prof, Mechanical Engineering

Project Partially Sponsored by KSCST, Gov. of Karnataka



DEPARTMENT OF MECHANICAL ENGINEERING

NITTE MEENAKSHI INSTITUTE OF TECHNOLOGY

YELAHANKA, BANGALORE-560064

2014 – 2015

ABSTRACT

Waste management crisis is a big issue which needs to be solved on an urgent basis. The waste produced should be effectively utilized. The aim of this project is to design and develop Segropactor. Segropactor is an easy to install, user-friendly and low cost solution to contain the waste at its origin. In large households or industrial settings, mixed trash can accumulate at a fast pace making garbage collection expensive and repetitive. Segregation of this mixed waste is hard and further processing of such waste is also tedious. Our product Segropactor is the perfect solution for these problems.

Segropactor has mainly two units- segregation and compaction. The main idea behind our product is to separate and compact the waste by reducing their volumes which will help in efficient solid waste management. This is achieved by using a fleet of sensors and an electrically operated press. The whole system can be powered by regular single phase AC supply from any domestic source. Segropactor showcases a prototype of the technology which can be modified to suit different environments.