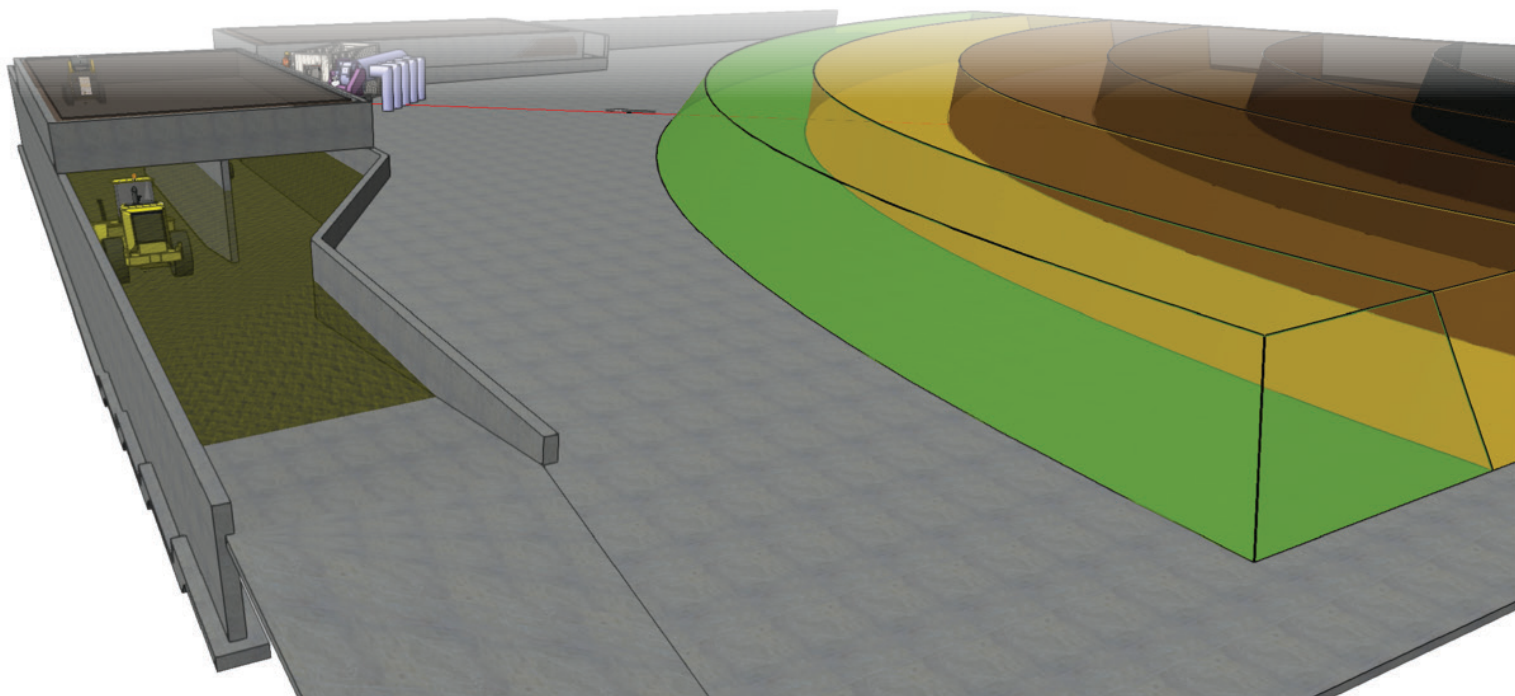


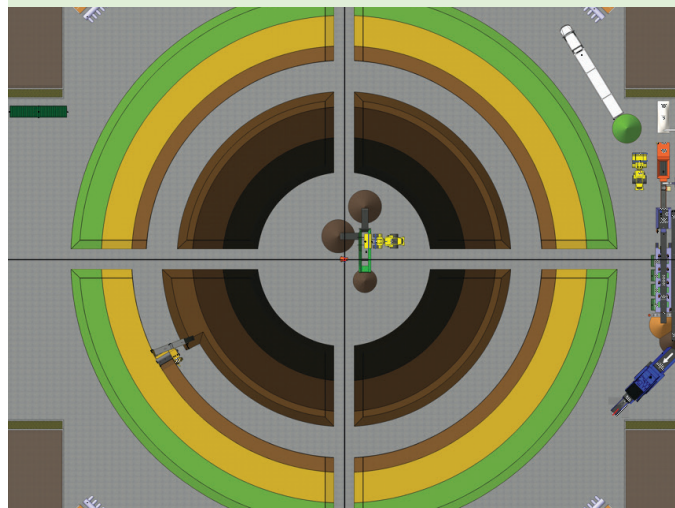
Circular Turned Aerated Pile



In an ongoing effort to provide more composting capacity on a smaller footprint, GMT has developed the patented Circular Turned Aerated Pile, or cTAP. The concept of the cTAP is simple: make the longest continuous and easily-accessible row possible on a square site. Place your grinding, receiving and first aeration zone in the outer circle, and turn the rows inward using side discharge compost turning equipment.

With its substantially longer piles, the turning frequency of a cTAP system is reduced to once per week for a total of 5 turns over 35 days. The turner circles directly to the beginning of the next row, reducing reset time between passes time to zero. The volume reduction during composting becomes an advantage as the footprints of the piles slowly concentrate with each turn. The pile height stays level across the circle after a turn and does not require the use of a loader.

Green — Grinding and receiving
Yellow — First aeration zone
Brown — Second aeration zone
Black — Third aeration zone



cTAP Design Features

Modularity

The cTAP's concrete aeration floor consists of six concentric aeration zones. Each quarter section of the circle has its own blower, biofilter, and water catchment and reuse system. Each one is capable of processing over 125 tons per day, and the system can be expanded incrementally as your capacity needs grow.

Odor Control with Positive, Negative and Reversing

The blower and damper manifolds can provide air in both positive and negative flow directions. In negative the air is directed to a biofilter in the outer corner of each quarter section. In positive, the 1st 2 zones use a biocover to limit emissions of volatile organic compounds. A reversing control automation system is used to reduce temperature gradients, reduce water losses, and speed up the composting process significantly. The automation system is web enabled and can be accessed from any internet linked computer or mobile device.

Below-Grade Aeration Systems

The cTAP system is based on a tried and true TAP aeration floor design using high velocity air nozzles embedded in a concrete floor to reduce clogging, shown below. Pipes distributing air under the cTAP system are below the concrete working surface. GMT below grade aeration systems can last over 25 years without replacing pipes, nozzles or dampers. Typically, blower motors are replaced every 5 years.

Partially enclosed water storage area and elevated biofilters.

