

# CO-COMPOST FACILITY

*Reduction of Fecal Coliform, Greater Volatile Reduction, Decreased Compost Cycle, Increased Bacterial Action and Elimination of Odors*

In September, a Texas Co-Compost facility began operations. With assistance from the City's representative firm, the first two windrows of wood chips and sewer sludge were mixed. In approximately six or seven days, average windrow temperatures had risen to 55 degrees C or higher. The windrows were apparently properly mixed at a ratio of 1.25 to 1.0, chips to sludge. After 38 days in a windrow, the windrows were moved to a static pile and left alone for another 24 days. Final product was run through the shaker-screener and stockpiled while testing results were being tabulated. The results, to no ones surprise, indicated that the regulated pollutant rates for heavy metals had been met without any problems.

During the first 90 days of operation, there were several odor complaint days registered by a neighbor living down wind some 1/8 mile from the site. The formulation of the windrows from then on took the addition of **BYO-GON PX-109®**. Applied to the base of wood chips and incorporated into the windrow by the windrow turning machine, **BYO-GON PX-109®** has helped achieve the following results:

1. **Total reduction of fecal coliform** in windrow.
2. Less or nearly **no odors** emitted from a cooking windrow.
3. Temperature rises to above 55 degrees Celsius in 3 to 4 days versus previous 6 to 7 days.
4. **Higher temperatures**, indicating more bacterial action in the windrow, so that minimum 15 days at 55 degrees C is met in 18 to 20 days, even with rainfall.
5. A **greater percent volatile reduction** of windrow indicating increased bacterial activity during process cycle.
6. Greater temperatures in static pile, indicating a further continuation of the reduction of the volatile materials.
7. A greater percentage of fines or product passing through the 3/8" screen on the final process separation, indicating **enhanced breakdown of wood waste products**.

Not only do odors normally associated with sewer sludge digestion vanish, the enhanced bacterial action provides a superior end product. An average 44% volatile reduction assures ample vector control and a fecal free end product opens other avenues for beneficial use. The cost of **BYO-GON PX-109®** in addition to a windrow compost process averages 7.2 cents per cubic yard of compost material and is easily offset by the benefits realized.