PECONIC GREEN GROWTH
TECH INFO SHEET

*Firm:* Sun-Mar Inc.
www.sun-mar.com

*System:* **Composting Systems**

*Category:*

**COMPOSTING SYSTEM**

**Composting Toilet**

**Full building system**

*Process:* There are two basic options: a composting toilet with three chambers or a whole house system. The system relies on composting and evaporation of liquids. Users add a bulking, carbon media and turn the drum after use. This mixes and aerates the waste. Liquid is drained and sent to the evaporation chamber. In the evaporation chamber electric units provide heat and air flow to evaporate the liquid. Non-electric units relay on a vent stack, with a optional 12 volt fan. By rotating the drum in the opposite direction, compost drops to a finishing drawer for final composting isolated from incoming waste.

A whole-house version uses a low water flush or A/F waterless toilet. Waterless toilets need to be located above the central treatment unit/ low flow can be up to 15 feet from the unit.

*System:* Waterless or low-flow toilets, fan and properly sized tanks., Greywater needs to be dealt with independently.

*Flow Range:* Adaptable to any size.

*Tests:* NSF/ANSI 41 for Dry Systems

*Cost:* $2,000 - $3,000 for equipment (available at Home Depot) Does not include installation.

*Energy:* kWh

*Tanks:* Polyethylene

*Venting:* Exhaust through house with fan

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*Telephone:*
888 341 0782

*Footprint:* Toilets only: 5.5 SF 2.75' H; the central unit is about 10 SF, usually in the basement or similar configuration.

*Height:* 2.5 feet.

*Life Cycle:* Fan and pump 3-7 years (Cost:$200)

*Warranty:* 5 years for the tank; 3 years on all other components.

*Maintenance:* Daily rotations, adding bulk material, removal of treated product as per manufacturer instructions and local regulators.

*Notes:* Suffolk County requires that a septic system also be available, which duplicates some system costs.

The composting chamber needs to be kept at a temperature above 55 ° Fahrenheit, otherwise it acts as a holding tank.

*Installations:* Throughout the U.S.A., especially in remote locations.

*Treatment:* Removes 90-100% of the nitrogen from the onsite dispersal system. How the removed product is applied will impact watershed overall loading.

*Advantages:*

- Adaptable to site conditions
- Full recycle of nutrients
- Low energy use

*Disadvantages:*

- Change in behavior, as requires adding media and turning drum daily
- May require duplication of system components due to local regulation