

Compost Production Procedures

Compost is produced on a large layer operation using the aerated and turned windrow method. Fresh manure is removed from the henhouses on a periodic basis every 3 to 5 days. The manure is piled in a windrow in the first 20 feet of each compost bunker. Windrows are turned approximately every 3 days with each tum moving the compost 20 feet down the length of the building. The first 100 feet of windrow are aerated by using fans to blow air through a perforated pipe located in a trench in the floor. It takes about 15 turns over a period of approximately 45 days to reach the back of the building. Temperatures in the windrows reach a minimum of 135° F for at least three turns (9 days) and stay above 131° F for at least 15 days which is 5 turns of the material. Final moisture levels are in the 20 - 30 % range.

The only ingredient is poultry manure from laying hens and replacement pullets. The compost machine is scraped down after it finishes turning each row. In addition, the machine performs two cleanouts before reaching the back of the bunker. Each cleanout purges the compost turner with heated (131° F minimum) compost.

Pelleted Fertilizer Production

The composted poultry manure (see above) is used to make organic fertilizer at the farms fertilizer manufacturing plant. The compost is extruded through a pellet mill, then dried at a temperature of 155° F to below 12% moisture. As the compost will vary in moisture level entering the pelleting process, length of the drying period is dictated by the time needed to reach 12% moisture or less. The dried pellets are then crumbled and screened for size. Crumbles can be bagged, placed in bulk sacks (~2,000 lbs. each) or sold as bulk product.

The composting and pelletization methods meet the requirements for pathogen reduction for both OMRI and NOP certification

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