Through the efforts of former NYS Senator Jen Metzger and other Hudson Valley State legislators, five Hudson Valley conservation districts were given the opportunity to participate in a 'Carbon Farming/Soil Health' demonstration project. The project aims to show how certain conservation practices can reduce greenhouse gas emissions, make soils more productive and erosion-resistant, protect water quality, and provide other benefits.

Six Orange County farms are participating in this Hudson Valley Carbon Farming project. Two of these farms will implement composting projects. Proper composting safely converts manure and other organic materials into a soil amendment that increases soil organic matter/tilth, provides a natural source of plant nutrients, and can provide other benefits such as weed suppression.

One of these systems is being installed on an organic vegetable farm in Greenville. It will demonstrate the use of a fairly low-cost system where composting is done on an unimproved (unpaved) and uncovered surface. Although low-cost, it is not necessarily low-tech. While many composting operations rely on mechanical turning to maintain conditions amenable to aerobic breakdown of the organic material, this Greenville system will employ a 'static aerated pile' approach that forces air into the pile via perforated pipes. The forced air is supplied by an affordable 'bounce house' fan. The perforated pipes are placed on a bed of wood chips, and covered with whatever 'recipe' of organic materials the farm is using – in this case, the main material will be horse manure with bedding. This material commonly has a carbon-nitrogen ratio and moisture content that makes it suitable for aerobic composting with little or no amendment.

Although our participating Greenville farm has not put their system into operation yet, reports from similar systems are that a finished batch of compost can be produced in as little as a few weeks with no other intervention than adjustment of the fan cycle based on monitoring of the pile temperature.

Check back over the next few months for updates as the system is put into operation.

One component of the project is an Access Road to ensure that delivery trucks can reliably reach the compost materials stockpiling area. An electric line will also be run to the site to power the blower that will aerate the pile.

This fairly small system will use a 20x40 ‘compost pad’. The wood chip bed will be covered with a grid of perforated pipe before placement of the material to be composted. When the process is complete, the pipes are simply pulled from the pile before harvesting the finished compost. A ‘compost fleece’ will cover the working pile – allowing for air movement while shedding excess moisture.