

**New York State
Environmental Investment Program
Capital Project Summary
Sunrise Farms, Inc.**

Project Background

Sunrise Farms, Inc. is a family-owned poultry farm that supplies Specific Pathogen Free (SPF) chicken eggs to a worldwide market for use in research and vaccine manufacturing. Sunrise was established as the first commercial producer of SPF eggs in 1950, and continues as one of three such suppliers in the United States.

As expected, Sunrise Farms generates large amounts of manure and flock mortalities that must be managed in an environmentally-sound and economical fashion. In response to increasing regulatory restrictions on land spreading and rising costs for handling these wastes, the business' principals began considering the possibility of converting these wastes into a saleable, rich soil amendment. These organic byproducts could be composted on site, and in addition, offered the potential for generating income from the process.

Project Description

Sunrise Farms' egg production schedules require flock depopulation and clean out of hen houses every 10–12 weeks. At any given time, up to eight buildings can be included in a rotation, with each generating about 270 tons of manure and 12 tons of mortalities. The manure and mortalities would be combined with a carbon rich soil amendment, wood shavings, and formed into windrows to accomplish simple aerobic composting. The windrows would be monitored regularly for temperature and moisture and turned as necessary. The project would utilize

two "Cover All" structures, each 72-ft X 250-ft in size, a Screenmachine Trommel, a 950-B Caterpillar Loader, a John Deere 5520 Tractor, and a Scat 481P Windrow Turner to convert the organic wastes into a soil product. Following 12 weeks in windrows, the composted material would be screened and placed in piles for further aging. The final product would be blended with sand and be ready for sale six months after the process began. In this new form, the nitrogen from the manure would be converted to a more stable organic form that is less likely to leach into ground water or be carried away by runoff. In addition, after being applied to soil, the nitrogen present becomes readily available for uptake by crops, leaving less nitrogen residue in the soil and preventing nutrient overload.

Project Results

What were environmental liabilities, raw manure and chicken carcasses, are now transformed into a commodity that serves as a saleable soil amendment. Since this project's inception, Sunrise Farms has recycled over 18,900 tons of poultry manure, carcasses and bulking materials, and has realized additional income of \$214,148 through the sale of 10,800 cubic yards of soil amendment product. Sunrise also earned another \$55,000 from tip fees for the wood shavings it is using as a necessary carbon source for the composting process. Previously, Sunrise had to buy wood for composting.

Contractor:	Greene County Soil and Water Conservation District	NYS EIP Investment:	\$192,494.95
County:	Greene	Contractor Match:	\$202,450.00
ESD Region:	Capital	Total:	\$394,944.95
ESD Contact:	518/292-5340	Completion Date:	October 2007