Remediation of Abandoned Poultry Houses

About NRCS
The USDA Natural Resources Conservation Service (NRCS) in Delaware helps farmers, and forest landowners conserve the nation's soil, water, air, and other natural resources.

All programs are voluntary and offer science-based solutions that benefit both the landowner and the environment by addressing high priority environmental protection goals.

If you own or manage farm or forest land in Delaware, the USDA Natural Resources Conservation Service (NRCS) can be a great resource to help you achieve your operational goals.

Contact your local NRCS field office for more information.

Purpose
The USDA Natural Resources Conservation Service (NRCS) in Delaware is offering poultry remediation to landowners as a conservation practice under the Environmental Quality Incentives Program (EQIP). The purpose of remediating abandoned poultry houses is to reduce the potential for excessive amounts of nutrients leaching into Delaware's shallow groundwater aquifers.

Background
Research\(^1\) shows that poultry houses are built over soil that can accumulate mineral nutrients through diffusion of the ammonia component of manure over a 30-50 year period. This can result in a buildup of excessive amounts of nutrients, primarily nitrogen in the soil material just under the poultry floor.

The estimated life span of a poultry house is 40 years. Once production ceases, the houses are left to slowly deteriorate. Once the roof deteriorates, rainwater can leach the excess nutrients into the groundwater. Since surface aquifers contribute to the water flow in ditches and recharge aquifers used for drinking water, this source of contamination becomes an important water quality resource concern.

Landowner Benefits
The remediation of poultry houses is a project of the USDA NRCS in Delaware. Landowner benefits from remediation may include the following:

- Technical and financial assistance through NRCS’ EQIP to assist with all approved costs associated with remediation.

- Improved soil quality as remediated area can be planted to vegetation.

- Enhanced landscapes.

If 500 abandoned poultry houses were to be remediating in Delaware, the potential for approximately three million pounds of nitrates to reach the bays we swim in or the groundwater sources used for drinking water would be reduced.
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Payments Benefits

NRCS is offering financial assistance for items that benefit the process of nutrient utilization. (Historically Underserved producers, including beginning and socially disadvantaged farmers, may receive an increased payment rate of the average estimated cost.) This includes demolishing the house and grinding the wood, excavating the soil and land-applying it to cropland. Assistance is also provided for replacing the nutrient-rich soil with clean soil and reseeding the site.

Eligibility

At least 80 percent of the poultry house roof must be intact.

All poultry growers who meet NRCS eligibility requirements can apply for assistance through the Environmental Quality Incentives Program (EQIP).

How Do I Apply?

Contact your local USDA Service Center to speak to one of our conservation professionals to begin the program application process.

Applications may be submitted continuously throughout the year; however application deadlines are set at specific times.

1 Research conducted by Gordon Johnson, extension specialist with University of Delaware Cooperative Extension.

Poultry House Remediation: Basic Phases

Phase 1: Abandoned poultry house before remediation.

Phase 2: Gutting house and removing the top 7 inches of soil pad.

Phase 3: Stockpiling trusses and sidewalls.

Phase 4: Grinding stockpiled material.

Phase 5: Outside company provides extra ground wood to be mixed with the remaining inches of soil pad.

Phase 6: Mixing process shown here.

Phase 7: Completed mix of lower soil pad with ground wood.

Phase 8: Finished cap and seed.