

**Closure of Waste Impoundments
Remediation of Abandoned Poultry Houses**

Conservation Practice Job Sheet

360



Remediated Abandoned Poultry House Site

Definition

Remediation of abandoned poultry house sites involves several processes. The lifespan of this practice is 5 years.

1. The removal of the house and the disposal of the material in an environmental safe manner.
2. The removal and land application of nutrient enriched soils in the original poultry manure zone according to a nutrient management plan.
3. The mixing of woody material into the remaining soil pad that will sequester nitrogen by the composting process.
4. Adding clean soil to the site by filling, shaping, and seeding with recommended vegetation to utilize remaining nutrients.

Purpose

Eliminate the source of the potential loss of nutrients from nutrient enriched pads into shallow groundwater aquifers before the roof deteriorates and rainwater becomes the dominant leaching mechanism.

Prequalification for cost share

1. 80% of the roof must be intact.
2. Inside floor of chicken house has not been modified with concrete or soil cement

Initial Required Information

1. Measure the width and length of houses.

House 1 Width _____ Length _____
 House 2 Width _____ Length _____
 House 3 Width _____ Length _____

2. Is adequate land available for application of nutrient enriched soil to cropland? You will need approximately 50 acres for a 20,000 square foot poultry house.

Yes No

If the answer is no, contact the DE State Office for alternatives.

3. An electrical conductivity (EC) sample shall be taken prior to ranking of contracts to determine potential level of nitrates. Each sample consists of the soil taken from twenty locations within the houses taken at random using a 1 foot auger on a cordless drill, 1 foot in depth, and mixed into one sample. 1/2 of this sample will be used to take a quick EC check to determine potential level on nitrogen. The balance of the sample will be sent to a lab to determine pH and nutrient content of the first 12 inch zone.

Prior to Remediation

1. All utilities (water, sewer, electrical) must be located under and between each house. Poultry houses near right-of-ways may contain utility lines or fiber optic cable. Draw a schematic of the poultry house noting house ID and location of utilities on page 4 of the job sheet. **It is the contractor's responsibility before digging to call Miss Utility of Delmarva at 800-282-8555 or 811 to have lines marked.**
2. A nutrient management plan utilizing the lab results shall be developed for the utilization of the pad soil material, in accordance with NRCS Conservation Practice Standard, Nutrient Management, Code 590.
3. An area approximately 50 feet by 40 feet will be identified where the ground wood chips from the timber frame can be temporarily stockpiled near each house.
4. The landowner will be provided a list of contractors by NRCS that has been verified to have access to the equipment necessary to complete the job.

Remediation Sequence

1. A pre-construction meeting prior to starting the job must be conducted with the producer, contractor, and NRCS planner.
2. Photographs will be taken of the house before, during, and after remediation.
3. A NRCS employee will locate the poultry house to be remediated on an aerial photograph and provide the following information – the length and width of the house, the distance to any adjacent structures, power poles, wells, septic systems, roads and driveways that are within 100' of the work area. If possible, show the distance from at least two corners of the poultry house to nearby permanent

structures (for example to the corner of an adjacent structure, concrete pad or power pole). This information will be shown on Sheet 4 of the Job Sheet. Include a north arrow indicating the approximate direction of due north.

4. Prior to removal of roof, the insulation, plastic, and other non recyclable material must be removed and hauled to the landfill. Metals such as cable, stoves, and waterers can be removed and sold for recyclables.
5. A minimum of 7 inches of pad soil will need to be removed. As much as possible shall be removed prior to roof removal. If this is not possible, soil pad removal shall begin within two weeks following roof removal, so leaching of the nutrients from significant rain events is less likely. If the soil can't be removed before two weeks, the pad must be covered with plastic. The client is to notify NRCS when the pad is being removed in order to verify depth removed.
6. Grind the standing frame (clean wood) and stock pile. Creosote and pressure treated timbers shall be separated and disposed of at an approved landfill. Clean blocks and by recycled into concrete.
7. Remove all courses of blocks and footer with backhoe or excavator and dispose of properly.
8. If not already completed, remove a minimum 7 inches of the pad soil for land application. Rates of application will be based on a nutrient requirement of the crop to be grown and the nutrient analysis of the nutrient enriched soil. It is recommended to spread the soil material using a wet lime spreader or manure spreader.
9. Stockpiled chipped wood and/or additional wood chips imported to the site will be thoroughly mixed into the remaining soil pad (7 – 12 inch zone). Eight tons of ground wood per 10,000 square feet is required, but up to 20 tons would be

acceptable. The purpose of mixing the ground wood with the remaining soil is to allow soil micro-organisms to sequester the remaining nitrogen in order to break down high carbon material.

10. Top off the site with clean soil equal to the cubic yards of nutrient enriched soil removed. Shape and crown the site. Allow for an approximately 3 inch crown in the center. This will exclude excess water from leaching nutrients until they are utilized or immobilized by the soil bacteria.
11. Seed site by applying lime and utilizing one of the following seeding mixes.

Seed Mix	Planting Date	Seeding Depth
Pearl millet 30 lbs. Switchgrass 10 lbs. PLS	5/1 – 5/31	0.25 – 0.5 inch
Cereal Rye 90 lbs. Tall Fescue 15 - 20 lbs.	8/15 – 10/15	0.25 – 0.5 inch

12. Follow-up sampling will be taken approximately one year later, taking core samples at the 0-12 inch depth. NRCS will supervise this activity.
13. Other relevant information, complementary practices and measures, and additional specifications may be included.

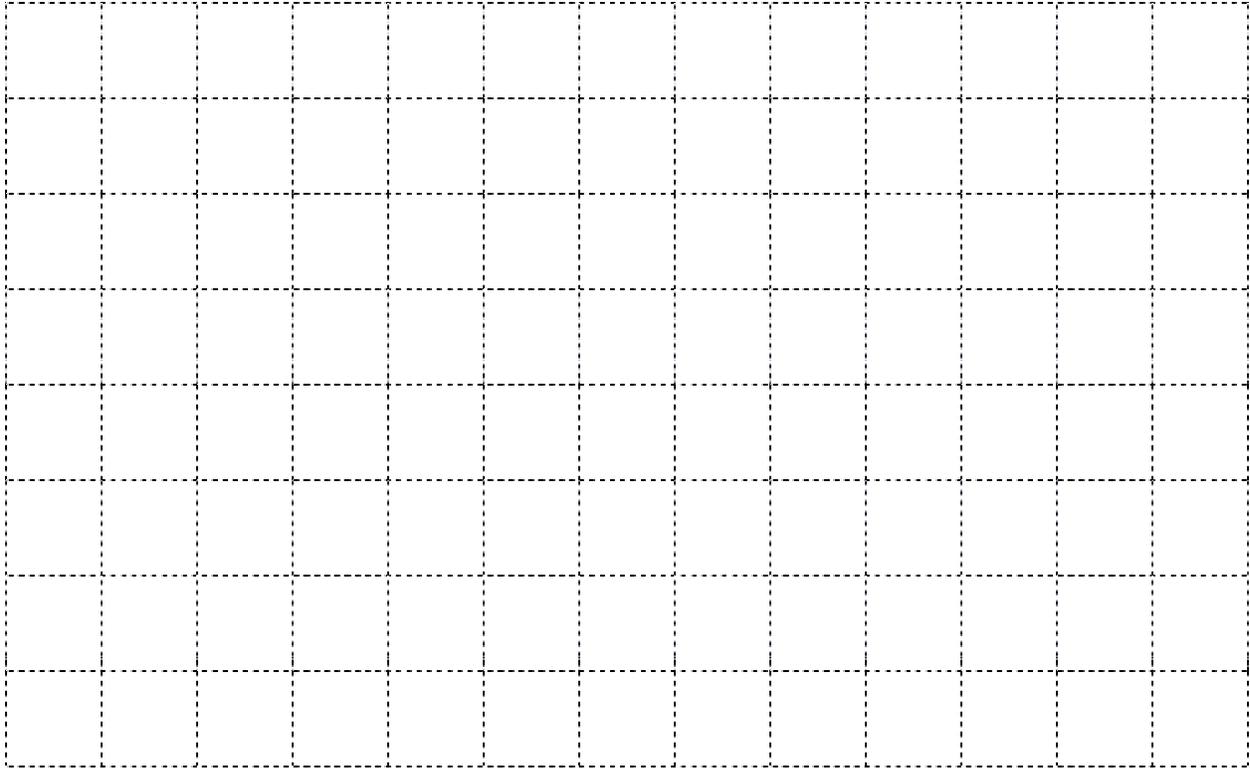
Operation and Maintenance

The site is to remain vegetated for 5 years. Re-seed any weak area to promote a good stand of vegetation. Follow up nutrient testing of the pad sites will be done. Oversight for the follow up tests will be by the NRCS and will not be charged to the contract holder.

Remediation of Abandoned Poultry House(s) – Job Sheet

Indicate location of remediated poultry house and adjacent structures as described in paragraph 3 under the Remediation Sequence, including a north arrow.

Scale 1"=_____ ft. (NA indicates sketch not to scale: grid size=1/2" by 1/2")



Remediation of Abandoned Poultry House(s) – Job Sheet

Certification
Producer/Landowner Signature: _____ Date: _____
I certify that that this practice has been completed according to NRCS plans and specifications.
NRCS Employee: _____ Date: _____

Additional Specifications and Notes:

The United States Department of Agriculture (USDA) prohibits discrimination in its programs on the basis of race, color, national origin, sex, religion, age, disability, political beliefs and marital or familial status.