



September 10, 2015

PENNSYLVANIA BULLETIN NO. PA 130-15-2

SUBJECT: Avian Influenza (AI) Soils Information

Purpose: Provide NRCS Staff guidance on handling requests for soils information on avian burial locations

Expiration Date: September 30, 2016

Background: In Pennsylvania, the allowable methods of disposal of AI infected bird flocks include: composting within the affected poultry house, composting outside, burial, landfill, rendering, and incineration. The method selected will vary from site to site. The State Veterinarian or other responsible official and guidelines from DEP (Department of Environmental Protection) will determine which option is selected. The disposal is to commence within 48 hours; therefore, the Pennsylvania Department of Agriculture has recently advised Poultry Operations to develop a "Flock Disposal Plan" for their operation. NRCS may be asked for soils information to determine soil suitability for composting or burial. NRCS is recognized as the lead federal agency for this information.

Action Taken: If requested, NRCS staff will provide soils information in the following manner:

For State Veterinarian or other responsible officials, i.e. (DEP) who want a specific burial location identified. Requests for soils information should be from sites with an Avian Influenza (AI) outbreak. Relay the request to your Resource Soil Scientist **immediately**. Schedule the site visit, **within one to two days**, and or coordinate an alternate soil scientist thru the State Soil Scientist. Personnel will need to follow all bio-security protocol implemented at that site.

For Producers who request soil information to supplement their "Flock Disposal Plan". Send the attached Supplement with the DEP regulations and guidelines to help them verify that they have areas that meet the criteria, especially the horizontal isolation distances. If the producer determines they have some potential sites, obtain information to create their Area of Interest (AOI) to develop a report. In many cases the report will show all of the site as "Very Limited". This is due to the extremely conservative rating system used.* Discuss the interpretations with your local Resource Soil Scientist or State Soil Scientist. In many situations you may be able to identify potential areas that would meet DEP criteria. State these findings in a separate cover letter along with a statement that if they want an on-site visit they can contact the "professional members of PAPSS (Pennsylvania Association of Professional Soil Scientist)" or other qualified groups/individual to handle providing this information.

*As part of the Annual Soils Refresh, the NRCS soils information will be updated in November 2015 and the interpretations will be less restrictive, in the future.

The required soils information can then be found as follows:

Link for the Web Soil Survey <http://websoilsurvey.nrcs.usda.gov/app/WebSoilSurvey.aspx>
After creating the Area of Interest (AOI) and associated Soils Map, Click on the “Soil Data Explorer” Tab, Click on the Suitabilities and Limitations for Use” sub-tab, then Select “Disaster Recovery Planning”. In the associated drop down menu select the appropriate tab, Composting Facility – Surface or Composting Facility – Subsurface (burial).

Any questions, contact Hosea Latshaw, PE, State Conservation Engineer at 717-237-2212 or hosea.latshaw@pa.usda.gov. or Joe Kraft, CPSS, State Soil Scientist at 717-237-2207 or joseph.kraft@pa.usda.gov as appropriate.



DENISE COLEMAN
State Conservationist

Attachment:
Supplement to PA 130-15-2

CC: MLRA Soils Offices
Derek Ruhl, PA Department of Agriculture

DEP regulations and guidelines related to Dead Animal disposal

In DEP regulations under section “§ 243.11. Dead animal carcasses.

- (a) The carcass of a dead animal not killed for food shall be removed and disposed of by burial or incineration or some other sanitary method within 24 hours after death.
- (b) If the carcass is buried it shall be placed so that every part shall be covered by at least 2 feet of earth and at a location not less than 100 feet from waters of this Commonwealth, and not subject to overflow by the waters.
- (c) In all cases of death from communicable disease the carcass shall be thoroughly enveloped in unslaked lime.”

Listed below are the guidelines to meet DEP regulations

Burial as a disposal option – consists of excavating a trench, placing the carcasses in the trench and covering them with soil.

Clean Water requirements

The Deputy Secretary for Water has determined that mass mortality burial does meet the definition for the various “agricultural” activities that are exempt from NPDES permitting under Ch. 102. Therefore, mass mortality burial requiring earth disturbance of an acre or greater in size will not require an NPDES permit from Clean Water.

DEP Nuisance regulations:

The 24 hour burial time specified in “Title 25 § 243.11 - Dead animal carcasses.” should not be enforced in a mass mortality emergency situations because burial may not be appropriate based on the cause of the mass mortality and may not be possible where there is insufficient space on the farm to safely bury all the carcasses. However, where burial is proposed, the following setback distances and site conditions that are based on past practices and modeled on the setback distances for on-lot sewage disposal systems are recommended.

Emergency Guidelines for mass mortality burial

All burial activities must:

- Have E&S *best management practices (BMPs) installed
- Have a written E&S plan developed and implemented if there is 5,000 ft.² or greater of earth disturbance. DEP, in cooperation with the Department of Agriculture and the State Conservation Commission, has developed a standard/generic E&S plan for use in these types of circumstances. Contact Ken Murin or Jennifer Orr for information on this.
- Be located more than 100 feet from the waters of the Commonwealth,
- Be located outside of the 100-yr flood plain,
- Be at least 2 feet above the groundwater table,
- Be covered by at least 2 feet of earth.

Burial Area Unsuitability

- A proposed area having the following characteristics should be considered unsuitable for the burial of animal carcasses where:
 - The slope of the proposed area is greater than 25%.
 - The area is identified by completed Federal Flood Insurance mapping as a floodway. Where there is no flood mapping, a flood way extends 50 feet from the top of the stream bank as determined by the local agency.
 - One or more rock outcrops exist within the proposed area.
 - The proposed area is underlain by limestone with depressions left by earlier sinkholes either in whole or in part within the area.
- Animal carcasses should not be placed in or on fill unless the fill has remained in place for a minimum of 4 years to allow restoration of natural permeability. The fill should be composed of clean mineral soil without large rocks, bricks or pieces of cement.

Minimum Horizontal Isolation Distances

- The minimum horizontal isolation distances between the features named and the proposed area for mass burial of animal carcasses should be:
 - A public water supply well, spring or reservoir – 600 ft.
 - An individual water supply well, cistern, spring or water supply suction line—100 ft.
 - Occupied buildings and swimming pools—100 ft.
 - Mine subsidence, boreholes, and sinkholes—100 ft.
 - Active on lot sewage disposal systems—25 ft.
 - Detention and retention basins and stormwater seepage beds—25 ft.
 - Natural or manmade slope greater than 25%—25 ft.
 - Property lines, easements or right of ways—25 ft.
 - Roads or driveways—25 ft.
 - Rock outcrop or identified shallow pinnacle—25 ft.
 - Streams, watercourses, lakes, ponds, wetlands or other surface waters—100 ft.
 - Surface drainage ways—25 ft.
 - Unoccupied buildings—25 ft.
 - Water supply line under pressure—25 ft.
 - If conditions warrant, greater isolation distances may be required.

*Contact your local Conservation District for guidance on developing these plans.

Note any questions concerning the guidelines should be directed to your Regional DEP office or to:

Mr. Kerry A. Leib | Director, Department of Environmental Protection | Emergency Response,
Rachel Carson State Office Building, 400 Market St. | Hbg PA 17101, Phone: 717.787.5715 |
Fax 717.772.3314, www.dep.state.pa.us