

Broiler Freezer Mortality Interim BMP for Chesapeake Bay Program Partnership's Phase 6 Model

July 19, 2018

Recommendations:

- The BMP will be named Broiler Mortality Freezers, and be available for interim credit for WIP and milestone planning purposes only.
- Broilers are the only eligible animal type for this BMP.
- States will submit wet tons of dead birds removed and county from which they were removed.
- Associated nutrients will be removed from manure available for application to crops functioning the same way manure transport out of the watershed currently functions. Nutrient assumptions follow below.
 - Assume that each dead broiler carcass contains 2.9% N and 0.49% P.¹ This translates to 58 lbs of N and 9.8 lbs of P per ton of dead broiler carcasses:
 - $2,000 \text{ lbs dead broiler carcasses} \times 0.029 \text{ lbs N/lb carcass} = 58 \text{ lbs N/ ton broiler carcass.}$
 - $2,000 \text{ lbs dead broiler carcasses} \times 0.0049 \text{ lbs P/lb carcass} = 9.8 \text{ lbs P/ ton broiler carcass}$
 - Apply a conservation factor of 50% as this is an interim BMP and values have not been assessed by an expert panel. This results in final values of for interim credit of 27 lbs of N and 4.9 lbs of P per ton of dead broiler carcass.
 - Assume the individual nitrogen and phosphorus constituents within total nitrogen and total phosphorus are the same as that of broiler litter given the lack of information available.

¹ Values taken from Simpson, T. and S. Weammert. 2009. Mortality Composting: Definition and Nutrient and Sediment Reduction Effectiveness Estimates. In: Developing Best Management Practice Definitions and Effectiveness Estimates for Nitrogen, Phosphorus, and Sediment in the Chesapeake Watershed: Final Report. University of Maryland Mid-Atlantic Water Program. p. 393-413.