

DEAD BIRD ROTARY DRUM COMPOSTER SIZING WORKSHEET

Conservation District: _____ Field Office: _____

Cooperator: _____ Location: _____

Identification No.: _____ Field No.: _____

A. Volume of Dead Birds

Nb = Number of birds in flock = _____

M = Mortality rate as a decimal = _____

Wb = Weight of birds near maturity, lbs. (ex.: 5.5 lbs for broilers) = _____ pounds

WF = Weight factor (use 0.25 for birds with Wb of 4.5 or less, 0.33 for larger birds) = _____

V_B = Volume of dead birds

$$\mathbf{Nb} \quad \times \quad \mathbf{M} \quad \times \quad \mathbf{Wb} \quad \times \quad \mathbf{WF} \quad / \quad \mathbf{3} \quad = \quad \mathbf{V_B}$$

_____ x _____ x _____ x _____ / _____ = _____ gallons

B. Volume of Drum

D = Diameter of drum = _____ ft.

L = Length of drum = _____ ft.

V₁ = Volume of drum

$$\mathbf{V_1} = \mathbf{(d / 2)^2} \times \mathbf{\pi} \times \mathbf{L} \times \mathbf{7.48 \text{ gallons / ft}^3}$$

$$V_1 = \mathbf{(\quad / 2)^2} \times \mathbf{3.14} \times \mathbf{\quad} \times \mathbf{\quad} \times \mathbf{7.48} = \mathbf{\quad} \text{ gallons}$$

C. Number of Drums

No. of drums = V_B / V₁ = _____ / _____ = _____ drums

Recommended number of drums: _____

Designed by: _____	Date: _____
Checked by: _____	Date: _____
Approved by: _____	Date: _____