## Compost Volume and Density Calculation Sheet* <br> Date: <br> $\qquad$

1. Shape up and level out the compost in the back of the truck so it's as square as possible and even across the top and sloping as steeply at the rear of the truck body as possible.
2. Measure the width $(\mathrm{W})$ of the truck body: $\mathrm{W}=$ $\qquad$ inches
3. Measure the distance (D1) from the front of the truck body to the top of the compost pile: D1=
$\qquad$ inches. Also measure /estimate the longer distance (D2) from the front of the truck body to the bottom of the compost pile D2 = $\qquad$ inches. Compute the average distance (D) from the front of the truck body to the back of the compost pile as:
$\mathrm{D}=(\mathrm{D} 1+\mathrm{D} 2) / 2$.
4. Measure /estimate the height $(\mathrm{H})$ of the compost by estimating a horizontal dimension line from the top of the level pile and measuring to the floor of the truck body: $\mathrm{H}=$ $\qquad$ inches
5. Compute the volume of compost in cubic inches and cubic feet using the following formulas:
a. Compost Volume $\left(\mathrm{CV}\right.$ in $\left.{ }^{3}\right)=\mathrm{W} \times \mathrm{D} \times \mathrm{H}=$ $\qquad$ cubic inches.
b. Convert this volume in cubic inches to cubic feet using the following formula:

Compost Volume in cubic feet ( $\mathrm{CV} \mathrm{ft}{ }^{3}$ ) $=\mathrm{CV}$ in ${ }^{3} / 1728$.
$\mathrm{CV} \mathrm{ft}{ }^{3}=\mathrm{CV} \mathrm{in}^{3} / 1728=$ $\qquad$ $\mathrm{ft}^{3} \quad / 27=$ $\qquad$ cu yds

6. Compute the Density in pounds per cubic foot of the compost by filling the $0.53 \mathrm{ft}^{3}$ pail with compost and weighing it and subtracting the 0.5 lb tare:
a. Weight of compost plus Pail = Scale Reading = $\qquad$ lbs.
b. Weight of compost in pail (W) $=$ Scale Reading $-0.5 \mathrm{lb}=$ $\qquad$ lbs.
c. Compute the Compost Density $\left(\mathrm{D}_{\mathrm{C}}\right)$ in pounds per cubic feet using the formula $\mathrm{D}_{\mathrm{C}}=\mathrm{W}$ / $0.53=$ $\qquad$ $\mathrm{lb} / \mathrm{tt}^{3}$
7. You can compute the estimated tonnage of compost using the cubic foot volume computed in Step 5 and the density computed in Step 5 using the following formula:
a. Pounds of Compost $\mathrm{CW}=\mathrm{CV} \mathrm{ft}{ }^{3} \times \mathrm{Dc}=$ $\qquad$ lbs.
b. Tons of Compost $=\mathrm{CW} / 2000 \mathrm{lb} /$ ton $=$ $\qquad$ tons.

