# Silage Leachate Sample Calculations
## For Bunker Silos

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<table>
<thead>
<tr>
<th>Location/animal type/number/size or waste generation type</th>
<th>Production and characteristics</th>
<th>Estimated annual production calculations</th>
</tr>
</thead>
</table>
| Bunker Silos                                              | Example of Silage amounts 1,000 Tons Corn Silage 300 Tons Haylage 1,300 Total Tons | Leachate Volume:  
**Step 3.**  
Use 1 cu ft leachate/ton of silage or 7.48 gallons/ton of silage as per – NRCS- Agricultural Waste Management Field Handbook, Part 651 Chpt. 4, g.4-23  
Silage Leachate Calculation; 1,296 tons x 7.48 gals/ton = 9,694 gallons  
**Step 4.**  
Runoff Volume:  
Initial Runoff Collection; 40 ft x 120 ft = 4,800 sq.ft. x 0.5 inches/12 in/ft = 200 ft³  
200 ft³ x 7.48 gals/ft³ = 1,496 gals  
**Step 5.**  
 Recommend Silage Leachate and Runoff Collection of; 9,694 gals + 1,496 gals = 11,190 gallons |
| Step 1. Inside Bunker Dimensions                           | Silage tonnage; use a density of 45 lbs/ft³, this is based on fair to good compaction of the horizontal silo.  
57,600 ft³ x 45 lbs/ft³ x tons/2000 lbs = 1,296 tons |  |
| 40 ft wide x 120 ft long x 12 ft high                      |  |
| Bunk Volume = 57,600 ft³                                   |  |
| Spoiled Feed                                              | Spoil Feed 20 Tons            | Silage tonnage; use a density of 45 lbs/ft³, this is based on fair to good compaction of the horizontal silo.  
Volume: 20 tons x 2000 lbs/ton x 1 cu ft / 45 lbs = 888 cu ft/yr. |
|                                                           |  |