

Instructions

Waste Treatment Lagoon (Anaerobic) NE-ENG-65

Instructions for use of NE-ENG-65

Unless otherwise noted, all references are in the Agricultural Waste Management Field Handbook.

1. Maximum number of days during any year that liquid won't be removed and applied.
2. This length of time should match #1. The information will be used later to determine direct rainfall and evaporation from the surface of the pond.
3. This will be used to determine the dead storage needed for sludge.
4. See NE-ENG-82.
5. The weight of the dried total solids in lbs/(AU) per day (see tables in Chapter 4 of the Agricultural Waste Management Field Handbook).
6. The weight of solids that will volatilize.
7. Used to determine what fraction of the total animal waste volume will settle to the bottom and not decompose.
8. Total amount of sludge volume that must be accounted for in lagoon proportioning.
9. Determines the amount of dead storage needed to cause anaerobic action (if odor will be a problem, strong consideration should be given to reducing this loading rate by at least one-third). See page 10-29 of the Agricultural Waste Management Field Handbook.
10. *Minimum volume that must be accounted for in the lagoon proportioning to make the anaerobic action work.
11. *Total volume in the lagoon proportioning that must have a depth of six (6) feet or greater.
12. If the amount of wastewater that will be discharged from the facility is known, use actual figures. If it is not known, enter 20 percent of NE-ENG-82, item 7, in box 13 of this form.
13. Total volume of wastewater for the storage period.
14. *Total volume of wastewater and animal waste from the facility for the storage period shown.
15. Total storage needed to the depth adjustments for rainfall, evaporation, and freeboard.
16. Depth of storage to accommodate (15) volume with bottom dimensions and side slopes determined in (A).
17. Find designed depth of lagoon.

* See sample diagram

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