shall be incorporated into the top foot of soil until the 60 minute per inch percolation rate is reached. An artificial impermeable liner of 20 mils in thickness may be substituted.

b. Isolation. The isolation distances shall meet the requirements for absorption systems as specified in Section 19.a.

c. Groundwater protection and bedrock or impermeable soil separation.

(1) For single family homes, the depth to seasonally high groundwater shall be at least four feet from the bottom of pond.

(2) For all "small wastewater systems" other than single family homes, a minimum of three feet of unsaturated soil shall be maintained between the bottom of the pond and the estimated groundwater mound imposed on the seasonally high groundwater table. The height of the groundwater mound can be estimated from Figures 1-6, Section 20 in conjunction with the average daily sewage flow.

d. Sizing.

(1) The area of the lagoon shall be calculated based on the following formula:

$$A = \frac{584 \times Q}{(365 \times S) + (E - P)} \times 1.30$$

where:

A = Area of the lagoon at the 5 foot water level in square feet

Q = Average daily sewage flow (0.6 times the flow determined from Table 1)

S = Soil permeability in inches per day
"S" cannot be greater than 0.25 inches per day
"S" shall equal zero for an artificial liner or for bedrock

E = Annual evaporation rate in inches per year

P = Annual precipitation rate in inches per year

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