

How to verify treatment of septage with hydrated lime

1. After the addition of hydrated lime, determine the pH and the temperature of the septage.
2. Using the Temperature Correction Tables below, determine if the pH of the septage has met the minimum pH needed to achieve 12.0 after temperature correction.
 - a. **If the minimum pH has been reached**, document the time of day, the temperature of the septage, and the pH of the septage. Proceed to step 3.
 - b. **If the minimum pH has not been reached**, add more hydrated lime and return to step 1.
3. Wait at least 30 minutes.
4. Using the Temperature Correction Tables below, determine if the pH of the septage has met the minimum pH needed to achieve 12.0 after temperature correction.
 - a. **If the minimum pH has been reached**, document the time of day, the temperature of the septage, and the pH of the septage. Proceed to step 5.
 - b. **If the minimum pH has not been reached**, add more hydrated lime and return to step 1.
5. Land apply the septage in accordance with land application requirements.

Temperature correction tables

Temperature of the Septage (Fahrenheit)	Minimum pH needed to achieve 12.0 after temperature correction
32.1 - 35.0°F	12.8
35.1 - 41.0°F	12.7
41.1 - 47.0°F	12.6
47.1 - 53.0°F	12.5
53.1 - 59.0°F	12.4
59.1 - 65.0°F	12.3
65.1 - 71.0°F	12.2
71.1 - 76.9°F	12.1
77.0°F or higher	12.0

For example, if septage is 42.3°F, the pH must be at least 12.6

Temperature of the Septage (Celsius)	Minimum pH needed to achieve 12.0 after temperature correction
0.1 - 1.6°C	12.8
1.7 - 4.9°C	12.7
5.0 - 8.3°C	12.6
8.4 - 11.6°C	12.5
11.7 - 14.9°C	12.4
15.0 - 18.3°C	12.3
18.4 - 21.6°C	12.2
21.7 - 24.9°C	12.1
25.0°C or higher	12.0

For example, if septage is 20.7°C, the pH must be at least 12.2