



Fwd: Canebrake County - New storage tank

Kim,

We are looking forward to seeing you on Sunday. Our direction from the County of San Diego DEH is as follows:

"The tank is approved to be assembled by Water District personnel, however the disinfection of the new storage tank shall be overseen by a certified water operator with a minimum of a D1 Certification."

Below is our Disinfection Plan. Are we missing anything? And do you think we are good to perform the disinfection on Saturday and have you confirm on Sunday?

Disinfection Plan

- Lay tank on side
- Assemble fill and drain pipe assembly
- Perform surface spray disinfection using the concentration and method identified below.

Disinfection Method: Surface Spray

1. All surfaces that may contact water are coated with a 200 mg/L chlorine solution
2. Minimum contact time is 30 minutes
3. Following contact time, tank is filled with potable water to the overflow pipe
4. The tank will be drained of chlorine then tested for acceptable potable chlorine levels (< 2mg/L)
5. Coliform samples taken prior to placing tank in service

Known

Volume to spray = 30 gallons
 Sodium Hypochlorite = 10%
 Desired Concentration = 200 mg/L

Unknown

Volume Hypochlorite (amt to add)

$$C_1 * V_1 = C_2 * V_2$$

$$V_1 = \frac{C_2 * V_2}{C_1}$$

$$V_1 = \frac{0.02\% * 30}{10\%}$$

$$\frac{200 \text{ mg/L}}{10,000 \text{ mg/L}} = \frac{1\%}{0.02\%} \text{ (same as 200 mg/L)}$$

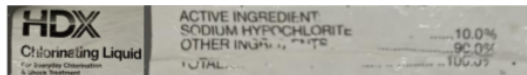
Tank Inner Surface Size:

14' feet high, 12' feet diameter
 Surface Area:
 $0.785 * D^2 * H$ (walls) + $2 * (0.785 * D^2)$ (floor + ceiling)
 $1582 + 226 = 1808$ square feet

(gallons of Hypochlorite) $V_1 = 0.06$ gallons (1 cup)

So to create 30 gallons of 200 mg/L chlorine solution, take 30 gallons of water with 1 cup of 10% Sodium Hypochlorite

Note: If we need more than 30 gallons to cover all surfaces, we will just make another batch!



Please find attached a draft Letter of Agreement, we can sign it on Sunday when you come out. If you could send us an email OKing our Disinfection Plan it would be great.

Thank you,

[Quoted text hidden]



KimChavez_Letter of Agreement.docx
57K