



PROCEDURE TO DISINFECT WATER STORAGE TANK WITH BLEACH

- 1) FILL THE STORAGE TANK WITH R.O. WATER.
- 2) SHUT OFF THE "POWER SWITCH" ON THE R.O. SYSTEM.
- 3) CLOSE THE VALVE AT THE BOTTOM OF THE STORAGE TANK (ST-1).
- 4) CLOSE VALVE ST-2 AT THE BOTTOM OF THE STORAGE TANK.
- 5) TO ADD THE CORRECT VOLUME OF 5.25% BLEACH, USE THE FOLLOWING FORMULA.
(.5% BLEACH = 5000 PPM.)

GALLONS OF WATER IN THE STORAGE TANK DIVIDED BY 1,000,000 = "A"
MULTIPLY "A" BY 5000 PPM = GALLONS OF BLEACH TO BE ADDED TO THE
STORAGE TANK.

EXAMPLE 800 GALLONS DIVIDED BY 1,000,000 =.0008 PPM OF BLEACH REQUIRED.
MULTIPLY.0008 X 5000 PPM = 4 GALLONS OF BLEACH.

- 8) SOAK TIME SHOULD BE A MINIMUM OF 15 MINUTES.
- 9) TO DISINFECT THE R.O. LOOP AT THE SAME TIME, REMOVE THE UF FILTERS AND
OPEN VALVE ST-2 AT THE BOTTOM OF THE STORAGE TANK.
- 10) TURN ON ONE OF THE R.O. DISTRIBUTION PUMP AND ALLOW THE BLEACH SOLUTION
TO CIRCULATE THROUGH THE R.O. LOOP BACK TO THE STORAGE TANK. TEST ALL
POINTS OF USE FOR BLEACH. TURN OFF THE R.O. DISTRIBUTION PUMP.
- 11) ALLOW THE BLEACH SOLUTION TO REMAIN IN THE TANK AND LOOP
FOR A MINIMUM OF 15 MINUTES.

RINSING THE STORAGE TANK

- 1) OPEN THE DRAIN VALVE AT THE BOTTOM OF THE TANK (ST-1) AND ALLOW THE
STORAGE TANK TO EMPTY TO DRAIN.
- 2) TURN ON THE R.O. SYSTEM AND ALLOW THE STORAGE TANK TO RINSE TO DRAIN.
- 3) PERIODICALLY TEST THE DRAIN FOR RESIDUAL BLEACH.
- 4) ONCE THE STORAGE TANK DRAIN TESTS NEGATIVE FOR RESIDUAL BLEACH CLOSE
THE DRAIN VALVE AND ALLOW THE STORAGE TO FILL WITH R.O. WATER.



- 5) OPEN THE RETURN LOOP VALVE TO DRAIN (ST-3).
- 6) TURN ON ONE OF THE R.O. DISTRIBUTION PUMP AND ALLOW THE R.O. LOOP TO RINSE TO DRAIN.
- 7) PERIODICALLY CHECK ALL POINTS OF USE FOR RESIDUAL BLEACH.
- 8) ALLOW THE LOOP TO CONTINUE RINSING UNTILL ALL POINTS OF USE TEST NEGATIVE FOR BLEACH.

OPTIONAL METHOD TO REDUCE THE RINSE TIME

- 1) CLOSE THE DRAIN VALVE ST-1.
- 2) TURN ON THE R.O. SYSTEM AND ALLOW THE STORAGE TANK TO FILL HALF WAY, THEN ADD ONE POUND OF ASCORBIC ACID TO NEUTRALIZE THE BLEACH (1/2 GRAM OF ASCORBIC ACID TO 1 GALLON OF WATER IN THE TANK).
- 3) ALLOW THE TANK TO FILL COMPLETELY. THE ASCORBIC ACID WILL NEUTRALIZE THE BLEACH WITHIN A FEW SECONDS.
- 4) EMPTY THE TANK AGAIN AND REFILL WITH R.O. WATER. PERFORM A TOTAL CHLORINE TEST TO CHECK FOR RESIDUAL BLEACH. REPEAT THIS STEP IF NECESSARY, UNTIL THE TOTAL CHLORINE TEST IS NEGATIVE. A pH TEST SHOULD ALSO BE PERFORMED TO INSURE ALL THE ASCORBIC ACID HAS BEEN RINSED FROM THE TANK.
- 5) ONCE THE TOTAL CHLORINE TEST IS NEGATIVE AND THE pH IS ABOVE 6.0, CLOSE THE DRAIN VALVE ST-1

THE ASCORBIC ACID SOLUTION CAN ALSO BE PUMPED THROUGHT THE R.O. LOOP BY TURNING ON ONE OF THE R.O. DISTRIBUTION PUMPS. THIS WILL NEUTRALIZE ANY BLEACH RESIDUAL IN THE LOOP.