

## Discharge Worksheet - Chloramine-T

**Instructions:** Use this Worksheet to calculate estimates of 1) the *maximum* amount of Chloramine-T to be used for a single treatment of fish at your facility, and 2) the resulting concentration of Chloramine-T in your total hatchery wastewater discharge.

*Handy conversion factors:* 1 part per million (ppm) = 0.0283 grams/cuft; or, 0.0038 grams/gallon.

### Calculations:

**Step 1 - Calculate the total flow of treated and untreated water during treatment period:**

1a Number of rearing units to be treated: 3

1b Total water volume (at treatment flow rates) to these units during treatment

period: 36,000 gal (gal.) or (cuft.) of treated flow

1c Total water volume to all other untreated units during treatment

period: 96,000 gal (gal.) or (cuft.) of untreated flow

1d Grand total hatchery discharge (Treated + Untreated):

132,000 (gal.) or (cuft.) of flow during treatment period.

**Step 2 - Calculate the amount of Chloramine-T needed:**

2a 2040 gms = 36000 \* 132000 \* 15 ppm  
Amount Vol. from line 1b Conv. factor\* Desired dosage

**Step 3 - Calculate Chloramine-T level in hatchery discharge during treatment period:**

3a 4.09\* ppm = 2040 / ( 132000 \* 0.00378 )  
Disch. level Amt. from line 2a Total vol. (line 1d) Conv. factor\*  
\*If in gallons use 0.0038  
 If in cubic ft use 0.0283

\*Chloramine-T was measured directly at our discharge pipe. Actual measurement was 0.005 ppm.