AGMIN NEWSLETTER No. 214

Cupricide[®] Drip System Application in Irrigation Conveyance Systems

Cupricide[®] can be applied in flowing channels with water flow rates up to 20 Megalitres per hour (20ML/hour). The product Cupricide[®] should be applied as soon as algae begin to interfere noticeably with normal flow of water, e.g., clogging of lateral headgates, suction screens and siphon tanks.

The water flow rate can be estimated using the formula:

Average Width (m) x Average Depth (m) x Velocity (m/s) x 3.6 = ML/hour

The dose rate of Cupricide[®] should be maintained for a period of 3 hours at a copper concentration of 1.0mg/L in flowing water. The table below gives some guidelines for the drip rate of Cupricide[®] under various water flow rates in a channel or water conveyance system.

Drip Rate Guide for Cupricide®

Water Flow Rate		Cupricide [®] Drip Rate	Volume of Cupricide® over 3 hours
ML/hour	ML/day	Litres per hour	Litres
1.0	24.0	9.5	28.5
5.0	120.0	47.5	142.5
10.0	240.0	95.0	285.0
15.0	360.0	142.5	427.5
20.0	480.0	190.0	570.0

The above quantities of Cupricide[®] will provide 1.0mg Copper per litre of flowing water over a 3 hour period, which is generally sufficient to remove susceptible blue-green algae Cyanobacteria).

For intermediate values of flow rates between 1-20ML/hour, the above recommended drip rates of Cupricide[®] should be adjusted by interpolation, on a pro-rata basis.

