## FEDERAL GUIDELINES PARAMETERS WITH EQUATION

Cadmium (	(CA)
Caumuni	LOU,

Caumum (Cu)		
Aquatic Life Short Term	hardness is 0 to < 5.3 mg/L hardness $\geq$ 5.3 to $\leq$ 360 mg/L hardness $>$ 360 mg/L	0.11 $\mu$ g/L $ CWQG(\mu g/L) = 10^{(1.016(\log(hardness)) - 1.71)} $ 7.7 $\mu$ g/L
Aquatic Life Long Term	hardness is > 0 to < 17 mg/L hardness ≥ 17 to ≤ 280 mg/L hardness > 280 mg/L	0.04 $\mu$ g/L $CWQG(\mu$ g/L)= $10^{(0.83(\log(hardness))-2.46)}$ 0.37 $\mu$ g/L
Copper (Cu)		
Aquatic Life Long Term	hardness is 0 to < 82 mg/L hardness ≥82 to ≤180 mg/L hardness >180 mg/L hardness is unknown	2 $\mu$ g/L $ CWQG(\mu$ g/L)= $0.2 \times e^{(0.8545(\ln(hardness))-1.465)} $ 4 $\mu$ g/L 2 $\mu$ g/L
Lead (Pb)		
Aquatic Life Long Term	hardness is 0 to ≤ 60 mg/L hardness >60 to ≤ 180 mg/L hardness >180 mg/L hardness is unknown	1 $\mu$ g/L $CWQG(\mu$ g/L)= $e^{(1.273(\ln(hardness))-4.705)}$ 7 $\mu$ g/L 1 $\mu$ g/L
Nickel (Ni)		
Aquatic Life Long Term	hardness is 0 to ≤ 60 mg/L hardness >60 to ≤ 180 mg/L hardness >180 mg/L hardness is unknown	25 $\mu$ g/L $CWQG(\mu$ g/L)= $e^{(0.76(\ln(hardness))-1.06)}$ 150 $\mu$ g/L 25 $\mu$ g/L
Nickel (Ni)		
Irrigation	when soil pH < 6.5 when soil pH > 6	1000 μg/L 5000 μg/L