



# Basis for EPA Recommended Cyanotoxin Criteria/Advisory Thresholds

Recreational Value = RfD x Body Weight/Ingestion Rate

where RfD = reference dose

$0.05 \mu\text{g}/\text{kg}/\text{day} \times 31.8 \text{ kg}/0.21 \text{ L}/\text{day} = 8 \mu\text{g}/\text{L}$  microcystins

$0.1 \mu\text{g}/\text{kg}/\text{day} \times 31.8 \text{ kg}/0.21 \text{ L}/\text{day} = 15 \mu\text{g}/\text{L}$  cyclindrospermopsin

- **Assumes 100% of child's exposure (ages 6 – 10) comes from incidental ingestion during swimming**
- **2016 draft document applied a Relative Source Contribution (RSC) factor of 0.8 and an incidental ingestion estimate of 0.33 L/day, yielding draft values of 4  $\mu\text{g}/\text{L}$  microcystins and 8  $\mu\text{g}/\text{L}$  cyclindrospermopsin**
- **DEP received a petition requesting that we adopt EPA 2016 draft thresholds as water quality criteria**