State

California

Connecticut

Illinois

Indiana

lowa

Kansas

Kentucky (Louisville District)

Massachusetts

Nebraska

New Hampshire

North Carolina

Ohio

Oklahoma

Oregon

Rhode Island

Texas

Vermont

Virginia

Washington

Wisconsin

Recreational Water Guidance/Action Levels Microcystin: 0.8 μg/L; Anatoxin-a: 90 μg/L;

Level 1: very low/no risk < 4 µg/L microcystin-LR

Level 3: serious risk > 20 μg/L microcystin-LR

Saxitoxin: PHA: 0.8 µg/L; NCA: 3 µg/L;

Option 1: Visible scum and cell count or toxicity Option 2: Toxigenic species >100,000 cells/mL

Microcystin provisional action level: 6µg/L

Option 3: Microcystis or Planktothrix > 40,000 cells/mL

Anatoxin-a: 1 µg/L;

Cylindrospermopsin: 4 µg/L

-Visual Rank Category 1: Visible Material is not likely cyanobacteria or water is generally clear.

-Visual Rank Category 2: Cyanobacteria present in low numbers. -Visual Rank Category 3: Cyanobacteria present in high numbers.

Microcystin-LR concentration results approach or exceed 10 µg/L Warning Level: Cylindrospermopsin: 5 ppb

Slide Courtesy of Lesley D'Anglada, EPA OST

Level 2: low to moderate risk 4 to 20 µg/L microcystin-LR

Health advisory: >4 µg/L to <20 µg/L for microcystin or > 20,000 cell/mL to <100,000 cell/mL cyanobacteria cell counts Advisory: >20,000 cells/mL of cyanobacteria cell counts;

Health Warning: > 20 μg/L or > 100,000 cell/mL cyanobacterial cell counts and visible scum present Caution: > 100,000 cells/mL of cyanobacteria cell counts 14 µg/L for microcystin-LR and ≥ 70,000 cells/mL for cyanobacteria cell counts Visible discoloration of the water or a surface scum may be considered for microcystin testing

Anatoxin-a: PHA: 80 μg/L; NCA: 300 μg/L Cylindrospermopsin: PHA: 5 μg/L; NCA: 20 μg/L 100,000 cell/mL of cyanobacteria cell counts and > 20µg/L for microcystin Cylindrospermopsin: 6µg/L;

Saxitoxin: 100 µg/L

76

Option 4: Microcystin: 10 μg/L; Anatoxin-a: 20 μg/L; Visible cyanobacteria scum or mat and/or cyanobacteria cell count > 70,000 cells/mL and/or ≥14 µg/L of microcystin-LR > 100,000 cell/mL of cyanobacteria cell counts and >20µg/L microcystin 4,000 cells/mL cyanobacteria cell counts or ≥ 6μg/L microcystin-LR and the visible presence of cyanobacterial scum Cylindrospermopsin: 4.5 µg/L; Saxitoxin: 75 µg/L

Microcystin ≥ 20 μg/L >50% of cell counts from toxigenic cyanobacteria Microcystin-LR: PHA: 6 μg/L; NCA: 20 μg/L;

Anatoxin-a ≥ 10 μg/L

Microcystin-LR: 6 μg/L;

> 100,000 cells/mL or scum layer

Microcystin ≥ 20 µg/L