

EXHIBIT 2

Monitoring Guidelines

Experienced monitoring personnel should make visual observations during weekly visits and document the visit on a log sheet, including taking Secchi disk depth where feasible. If visual signs of a cyanobacteria bloom are present, a whole water surface sample should be collected and analyzed for Identification and enumeration. If no visual sign of a bloom is present, no water sample will be collected and monitoring for the week will be complete. However, a whole water surface sample may be collected when there is any question about the bloom-type or density level. The following attributes may trigger collection of a water sample:

1. Significant decrease in Secchi transparency and a green color to the water,
2. Visible scum on the water that may resemble green latex paint, grass clippings, or pea soup,
3. Color change such as a turquoise shade that indicates cell mortality may be underway,
4. Visible evidence of cyanobacteria bloom identified in additional locations or at additional times,
5. Cyanobacteria blooms identified by the public and verified by OHA
6. Monitor taste and odor compounds, temperature, nutrients, color or anything unusual about the quality of the water.
7. Monitor raw water pH frequently to recognize any higher than normal pH values. Chlorophyll-a is a good indicator.

Collected samples should be analyzed for cell count and species identification within one week of visual observation of a bloom. If sample results indicate cell counts are at or above WHO Action Levels (Table 1), a whole water sample will also be collected to analyze for the presence or absence of associated cyanotoxins, (microcystin, nodularin, anatoxin-a, cylindrospermopsin and saxitoxin) at the bloom site. If the sample results indicate the presence of potentially toxic cyanobacteria species below guideline values, typical monitoring will continue.

Table 1. WHO Cyanobacteria Cell Count Action Levels that trigger toxic sampling for Drinking Water

Species	Action Level
<i>Microcystis</i> spp.	2,000 cells/mL
<i>Anabaena</i> spp.	15,000 cells/mL
<i>Aphanizomenon</i> spp.	15,000 cells/mL
Combination of all potentially toxic cyanobacteria species present	15,000 cells/mL

Table 2. Oregon Drinking Water Acute Toxicity Values, Cyanotoxins are measured in parts per billion (ppb) or micrograms per liter (µg/L), which are equivalent

Water use	Anatoxin-a	Cylindrospermopsin	Microcystins	Saxitoxins
Drinking water Adults (age 6 and older)	3	3	1.6	1.6
Drinking water Children (age 5 and younger)	0.7	0.7	0.3	0.3
Non-drinking uses (recreation)	20	20	10	10