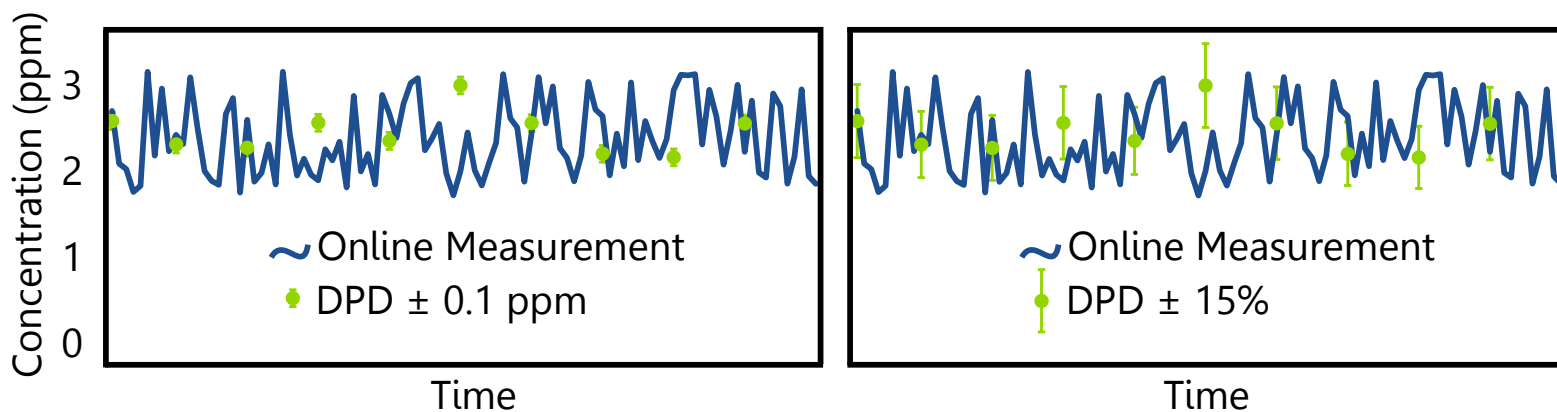


# Understanding Compliance Tolerances

## Compliance Tolerances Are Application-Dependent

- Online amperometric biocide measurements are most often validated using handheld colorimetric measurements.
- Most applications have a defined sampling frequency and tolerances for the system to remain in compliance, which are specific to the application.
- Drinking water applications usually follow USEPA 334.0, which states that, **"Analyzer reading [must be] within  $\pm 0.1$  mg/L or  $\pm 15\%$  (whichever is larger) of grab sample measurement."**
- Regulatory bodies build in tolerances like the ones above to account for inherent fluctuations and measurement errors that are present in both colorimetric and amperometric technologies.



## Which Tolerances Should You Use?

- The above graphs show data for an online analyzer in a drinking water application, which follows USEPA 334.0 compliance regulations (outlined above).
- The blue line shows the online measurement, while the green circles show handheld reference measurements.
- The error bars are either  $\pm 0.1$  ppm (left) or  $\pm 15\%$  (right).
- Because the error bars on the right plot are larger, the online analyzer should use the  $\pm 15\%$  tolerance.

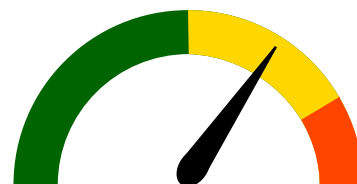
## KUNTZE BEST PRACTICES: Cloud Connect® Insights Package

- Kuntze Cloud Connect® is the remote monitoring and data acquisition tool you need to stay in compliance.

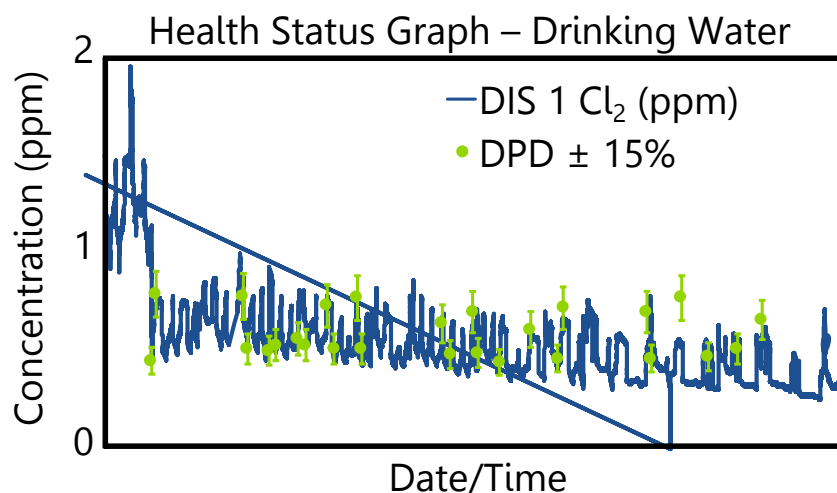


- With a Cloud Connect® Insights Package, you'll receive 12 monthly reports outlining daily process metrics, sensor health assessment, a Health Status Graph, and optimization suggestions.

Sensor Age:  
12 months



- The compliance-driven Health Status Graph overlays your online analyzer signal with your reference measurements, including customizable tolerances for your application needs.



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