**For each unique location**

**For water**

\*\*\*the little *a* represents each different substance…

**For sediment**

\*\*\*the little *b* represents each different substance

\*The same substance may have a different alkylation multiplier depending on whether it was measured in sediment or water.

\*the same substance always has different divisors depending on sediment/water

**Measured amount in dataset**

**Given by EPA spreadsheets**

Just the potency ratio for each substance

Latex formulas

$Chronic Benchmark Value = \sum \frac{Alkylation Multiplier \times Measured Amount of Substance (ug/L)}{Chronic Potency Divisor}$

$Acute Benchmark Value = \sum \frac{Alkylation Multiplier \times Measured Amount of Substance (ug/L)}{Acute Potency Divisor}$

\begin{center} \textbf{Sediment} \end{center}

$Chronic Bencmark Value = \sum \frac{(\frac{Measured Amount of Substance (ug/kg)}{Organic Carbon}) \times Alkylation Multiplier}{Chronic Potency Divisor}$

$Acute Benchmark Value = \sum \frac{(\frac{Measured Amount of Substance (ug/kg)}{Organic Carbon}) \times Alkylation Multiplier}{Acute Potency Divisor}$