

Delaware River Basin Commission

Status Update:

Stage 2 PCB TMDLs for the Delaware Estuary

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Toxics Advisory Committee Meeting
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Summary from July 2018 Presentation at TAC

- ❑ PCBs in Delaware Estuary were 100s to 1000s times higher than the WQC
- ❑ Stage 1 PCB TMDLs established for tidal River in 2003 and for the bay in 2006
- ❑ Over 64 percent PCB load reductions achieved from NPDES discharges through monitoring and implementation of Pollutant Minimization Plans
- ❑ Stage 2 PCB TMDLs are under development to implement (1) revised criterion; (2) equitable allocation; (3) adaptive management

From July 2018 Presentation at TAC: Current Status

- ❑ DRBC staff delivered draft Stage 2 TMDLs Report to EPA - March 2016
- ❑ Draft report sent to states for review and comment – June 2017
- ❑ DRBC staff responds to State comments through conference calls, meetings and written responses: July 2017 through on-going
- ❑ Currently, a meeting is scheduled with all three states and EPA to discuss on the implementation approach

Progress

- Co-Regulators (DRBC, NJ, PA, DE, and EPA Regions 2 and 3) met and agreed with the revised implementation approach – August 2018
 - Two-trigger level approach was introduced at the TAC in July 10, 2014
 - Two trigger levels incorporated into a single Action Level

Implementation Plan for NPDES Discharges

based on Implementation Strategy (July 2013)

- Pollutant Minimization Plan (PMP) Requirement - Develop, implement, submit annual report
- A provision that the Permitting Agency will establish elements of the PMP as enforceable requirements of the permit (e.g., milestones and key actions)
- Requirement to submit a revised PMP if permitting agency determines it necessary
- Monitoring using Method 1668A
- Submission of PMP Progress Report with permit renewal application
- Permitting Authorities document in the fact sheets that PMP is more stringent than technology based effluent limit (e.g., TSS limit)
- Action Level

Action Level

- ❑ Single Action Level – Revised approach (2018)
- ❑ Calculated for dry- and wet- weather specific
- ❑ Once Action Level “triggered”, optional confirmatory monitoring will follow
- ❑ Action Level is not an enforceable numeric effluent limitation
 - Notify DRBC and permitting Agency;
 - Submit effluent data;
 - Submit actions taken to identify and remedy the incident, and prevention plans;
 - Increase monitoring frequency.

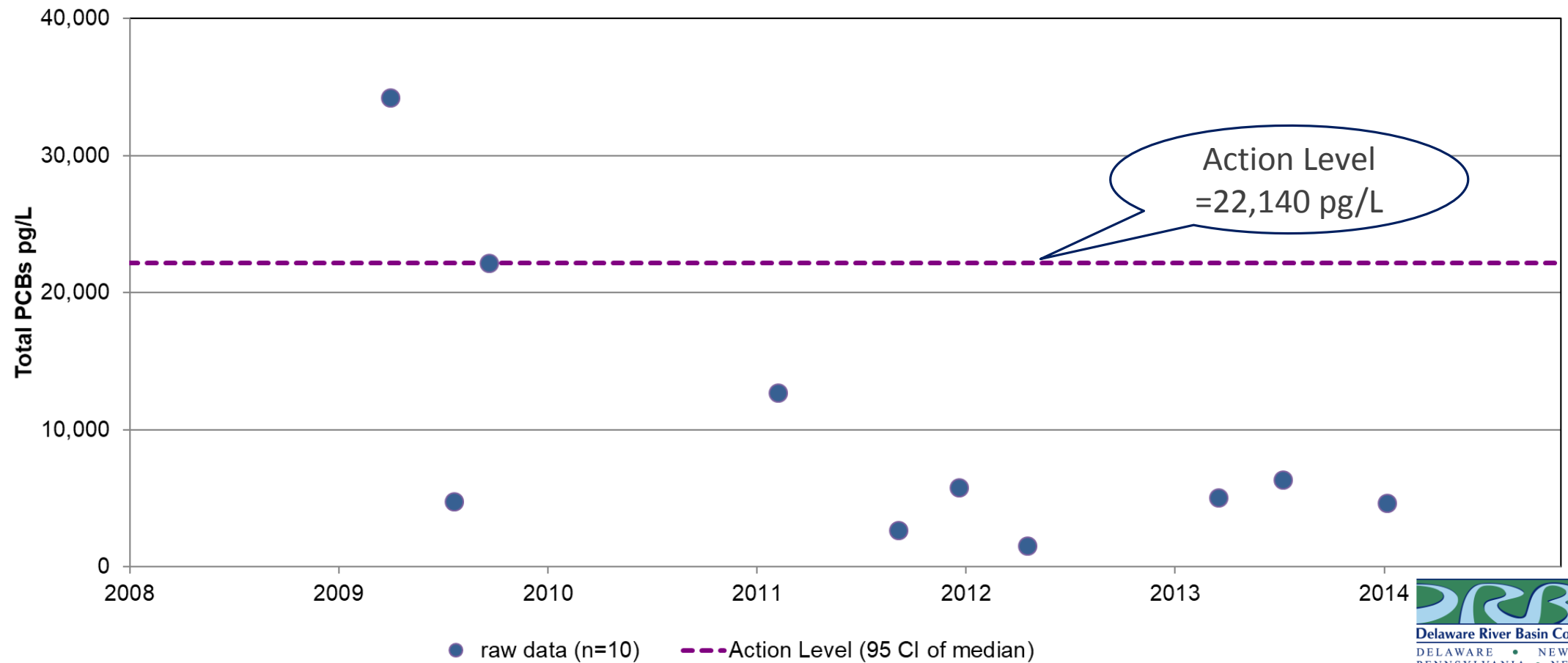
Calculation of Action Level

□ Definition: 95th confidence interval of the median.

1. Use the latest ten (10) effluent data points
2. Test for outlier(s)
 - Reach back and replace the outlier(s)
 - Utilize the ten (10) data points collected under normal, representative operating conditions for dry weather or wet weather
3. For sample size $n \geq 9$ approach utilizes Rank Order Statistics using formula: $1 + \frac{n}{2} + \frac{1.96\sqrt{n}}{2}$
4. Example: $n=10 \rightarrow 1 + \frac{10}{2} + \frac{1.96\sqrt{10}}{2} = 9.1$
5. Rank data from smallest to largest and select 9th value

Reference: https://epilab.ich.ucl.ac.uk/coursematerial/statistics/non_parametric/confidence_interval.html

Example



Additional Notes for the Action Level (AL)

- ❑ Implementations of AL are applicable to point source discharges (other than MS4s, at this time) to the Delaware Estuary identified in the Stage 2 PCB TMDLs.
- ❑ Data greater than AL will not be used in the AL calculations for the next permit renewal.
- ❑ A newly calculated AL in the following permit cycle must be less than or equal to levels contained in the current permit.
- ❑ In developing permit conditions, the state permitting agency in consultation with the DRBC, may utilize BPJ to adjust the AL including cases where the representative data trend is flat and concentrations are low (e.g., <500 pg/L).
- ❑ The permitting agency, in consultation with DRBC, may impose additional control measures for a discharge that triggers the AL.

Next Steps

- ❑ Draft Stage 2 PCB TMDLs report is being finalized by EPA and DRBC
- ❑ Draft Report will be sent out to states from EPA by mid-July, 2019
- ❑ A meeting between co-regulators and regulated community is being scheduled
- ❑ EPA Regions 2 and 3 discusses the detailed schedule to establish the Stage 2 PCB TMDLs for the Delaware Estuary