DDW Priorities: Methods and Reporting Limits

State Water Resources Control Board
Division of Drinking Water
Regulation Development Unit

Maximum Contaminant Level (MCL) Development

Health and Safety Code §116365(a) and (b):

- State Water Board must adopt primary drinking water standards (MCLs) that are
  - No less stringent than federal MCLs
  - ***As close as feasible to public health goal***
  - Placing primary emphasis on public health
  - Economically and technologically feasible

MCL Reviews

Health and Safety Code §116365(g):

- At least once every five years
- Provide public notice by March 1 of any proposed drinking water standard review
- Considerations for MCL Review:

  1) changes in treatment technologies that provide a greater protection of public health

  2) new evidence indicating a greater risk to public health

Public Health Goal (PHG)

PHGs are established by the Office of Environmental Health Hazard Assessment (OEHHA). They are concentrations of drinking water contaminants that pose no significant health risk if consumed for a lifetime, based on current risk assessment principles, practices, and methods. OEHHA establishes PHGs pursuant to Health & Safety Code §116365(c) for contaminants with MCLs, and for those for which MCLs will be adopted.

Detection Limit For Purposes of Reporting (DLR)

The DLR is the analyte-specific regulatory minimum reporting level above which the quantity of a contaminant must be reported.

Minimum Reporting Level (MRL)

The MRL is the minimum concentration that can be reported as a quantified value a target analyte.

MCL Review – Contaminant Groupings

Group 1 (MCL ≤ PHG)

- No significant health risk
- No benefit gained from lowering MCL

Group 2 (MCL > PHG, but no detections in drinking water sources in last 4 or more years)

- No or undetected exposure risk
- No measurable benefit gained by lowering MCL

Group 3 (MCL > PHG, with detections in water sources in last 4 or more years)

- Exposure risk above PHG
- Potential benefit gained by lowering MCL

2018 MCL Review

- All 82 MCLs evaluated in 2017
- MCLs for 55 contaminants evaluated this year
  - 29 MCLs are established at levels less than or equal to corresponding PHG
  - 26 regulated contaminants were not detected in the last four years of statewide monitoring of public water system sources
- No MCL revisions recommended
- Perchlorate DLR
  - PHG lowered from 6 ppb to 1 ppb in 2015
  - DDW recommended lowering the detection limit for reporting purposes – *Approved by Board July 5, 2017*
  - Recommendation coming later in this year

Contaminants for Detection Level Review

Group	Contaminant	MCL	DLR	PHG
3	Antimony	0.006	0.006	0.001
2	Beryllium	0.004	0.001	0.001
3	Cadmium	0.005	0.001	0.00004
2	Mercury (inorganic)	0.002	0.001	0.0012
3	Thallium	0.002	0.001	0.0001
3	Lead	0.015	0.005	0.0002
3	Carbon tetrachloride	0.0005	0.0005	0.0001
	1,2-Dichloroethane (1,2-DCA)	0.0005	0.0005	0.0004
2	1,3-Dichloropropene	0.0005	0.0005	0.0002
2	Benzo(a)pyrene	0.0002	0.0001	0.000007
2	Chlordane	0.0001	0.0001	0.00003
3	Ethylene dibromide (EDB)	0.00005	0.00002	0.00001
2	Heptachlor	0.00001	0.00001	0.000008
2	Heptachlor epoxide	0.00001	0.00001	0.000006
2	Lindane	0.0002	0.0002	0.000032
2	Methoxychlor	0.03	0.01	0.00009
2	Polychlorinated biphenyls (PCBs)	0.0005	0.0005	0.00009
2	Toxaphene	0.003	0.001	0.00003
3	Bromate	0.010	0.0050	0.0001

Unregulated Contaminants Likely to Require Validated Methods for Future ELAP Accreditation

Contaminant	Proposed Method
PFAS	EPA Method 537
Nitrosamines	EPA Method 521
1,4- Dioxane	EPA Method 522
HMX, RDX, TNT	EPA Method 529
Ethylene glycol	Method?

Electronic Data Reporting Changes

- Data submissions will be subject to U.S. EPA's Cross-Media Electronic Reporting Rule (CROMERR)

- The Compliance Monitoring Data Portal (CMDP) will be used for all data submissions.
  - Designed and maintained by U.S. EPA
  - CROMMER compliant

- CMDP offers 3 methods for submission:
  - Connect submitter data management systems to CMDP, one-way services: *Requires reconfiguration of current software associated with the laboratory information management system (LIMS)*
  - Generate XML files through the CMDP MS Excel spreadsheet tool for upload
  - Direct data entry using write-on webform

ELTAC Input Requested

- DDW is considering using CMDP by January 2019
- The drinking water regulations regarding electronic data submissions would be updated to reflect the use of the Environmental Information Exchange Network's Electronic Drinking Water Report
- The regulation process requires a cost impact evaluation
- DDW is seeking input from ELTAC to document:
  - Costs that are incurred
  - Savings generated
  - Additional benefit