

**New Jersey
Department of Environmental Protection**

Standards & Guidance Values for PFAS

NEWMAO States/EPA Meeting on PFAS

Worcester, MA

May 23, 2016



Does NJDEP have published limits for PFAS?

- PFOA Drinking Water Guidance (2007) – 40 ng/L (0.04 µg/L)
 - *Basis posted at:*
http://www.nj.gov/dep/watersupply/pdf/pfoa_dwguidance.pdf
 - *Basis published in:* Post, G.B. et al. (2009). Environ. Sci. Technol. 43, 4547–4554.
- PFNA Interim Specific Ground Water Quality Standard (2015) - 10 ng/L (0.01 µg/L)
 - *Basis posted at:*
http://www.state.nj.us/dep/wms/bears/gwqs_interim_criteria_table.htm

***What exposure duration, cancer risk level,
and other factors are used by NJDEP?***

- NJDEP standards and guidance values for drinking water and ground water are intended to protect for chronic (lifetime) exposure.
- Goals are:
 - No adverse effects from lifetime exposure for non-cancer effects.
 - Risk level from lifetime exposure of 10^{-6} for cancer.
- Other factors considered:
 - Analytical quantitation levels (drinking water and ground water standards)
 - Treatment removal technology (drinking water standards)

***What is the basis of NJDEP PFOA
Drinking Water Guidance (40 ng/L)?***

- Based on toxicological endpoints identified in USEPA (2005) Draft PFOA risk assessment.
 - Considered non-cancer and cancer endpoints
 - Most sensitive endpoints were ↓ body weight and hematological changes in female rats in chronic study.
- Many additional health effects studies have since become available.
 - Epidemiology studies from general population and communities with contaminated drinking water.
 - Toxicology studies, particularly developmental effects in mice.

***What is the basis of NJDEP PFNA
Interim Specific Ground Water Standard (10 ng/L)?***

- Based on increased liver weight in pregnant mice.
- More toxic and bioaccumulative than PFOA.
- No information on carcinogenicity is available.

***Is NJDEP considering development of
additional PFAS standards?***

- New Jersey Drinking Water Quality Institute (DWQI), a legislatively-established advisory body to NJDEP:
 - PFNA Maximum Contaminant Level (MCL) of 13 ng/L recommended in 2015:
 - Basis posted at:
http://www.nj.gov/dep/watersupply/g_boards_dwqi.html
 - Development of MCL recommendations for PFOA and PFOS currently in progress.
- NJDEP is currently developing Interim Specific Ground Water Quality Standards for PFOA and PFOS.
- Draft basis for DWQI MCL recommendations and NJDEP Interim Ground Water Quality Standards will be posted for public input.

Thank you!

For questions or additional information:

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