

Through a rule published in the *New Jersey Register* on September 4th, 2018, the New Jersey Department of Environmental Protection (DEP) amended the Safe Drinking Water Act rules (SDWA) N.J.A.C. 7:10 and the Private Well Testing Act (PWTA) rules N.J.A.C. 7:9E.

Rule changes include the adoption of a maximum contaminant level of 13 parts per trillion for perfluorononanoic acid, a perfluorinated chemical known more commonly as PFNA. The DEP also set a maximum contaminant level of 30 parts per trillion for 1,2,3-trichloropropane, also known as 1,2,3-TCP. The standards are based on recommendations made by the New Jersey Drinking Water Quality Institute (DWQI), an advisory panel comprised of a broad range of water-quality experts that reviewed numerous health studies and other data to support the stringent levels. The federal government currently does not have formal drinking water standards for either of these chemicals.

Why are new rules being implemented?

The amendments involve contaminants that have been determined to have detrimental health effects, as shown below. Therefore, these amendments are necessary to protect public health. In addition, the applicable treatment technologies often remove other contaminants of concern that are not yet regulated.

<i>Contaminant</i>	<i>Rule Amended</i>	<i>Health Effects</i>
PFNA	SDWA	Toxicity to liver, kidney, immune system, male reproductive system, and developing fetus and infant. Continued exposure to relatively low levels in drinking water result in increased in blood levels which remain for many years after exposure ends.
1,2,3-TCP	SDWA & PWTA	Potent carcinogen. Causes mutations and DNA damage.
EDB	PWTA	Potent carcinogen. Causes mutations and DNA damage. Toxic to male reproductive system.
DBCP	PWTA	Potent carcinogen. Causes mutations and DNA damage. Toxic to male reproductive system. Infertility in exposed workers.
Radiological (i.e. gross alpha, radium and uranium)	SDWA & PWTA	Known to cause bone cancer in humans. Uranium also causes kidney toxicity.
Arsenic	PWTA	Known to cause multiple types of cancer and other diseases (e.g. skin disease, cardiovascular disease, diabetes) in humans. Exposure to fetus or infant increases risk of many health effects later in life.

What is new?

PFNA– This new rule establishes the DWQI-recommended MCL for PFNA of 0.013 µg/L, as well as monitoring and treatment requirements for public community and non-transient non-community (NTNC) water systems starting in 2019. See further details below. Note: PFNA testing is not required under the PWTA.

1,2,3-TCP– This rule adds the DWQI-recommended MCL of 0.030 µg/l to the SDWA and requires monitoring and treatment, as necessary, at both public community and NTNC water systems starting in 2019.

The Division is phasing in the SDWA monitoring requirements for 1,2,3-TCP and PFNA as follows:

1st Quarter of 2019: all community water systems using a groundwater source(s) serving a population 10,000 or less and NTNC water systems will be required to begin quarterly monitoring at all points-of-entry to the distribution system; and

1st Quarter of 2020: all community water systems using a surface water source(s) and all community water systems serving a population greater than 10,000 will begin quarterly monitoring at all points-of entry to the distribution system.

Safe Drinking Water Act Rule (N.J.A.C. 7:10) and
Private Well Testing Act Rules (N.J.A.C. 7:9E) Amendments
SUMMARY FOR CERTIFIED LABORATORIES

Monitoring schedules will be available later this year through the DEP's Drinking Water Watch Application https://www9.state.nj.us/DEP_WaterWatch_public/index.jsp. In addition, correspondence will be sent to all water systems confirming monitoring schedule once available online. Compliance with the new MCLs will be based on a running annual average of four quarters of results.

Also, due to its occurrence in private wells and because it is a potent carcinogen and mutagen, the DEP is amending the PWTA to require testing of private wells at the time of sale of property. PWTA changes will be effective beginning March 3, 2019.

PWTA monitoring for Ethylene dibromide (EDB) and 1,2-Dibromo-3-chloropropane (DBCP) – The testing for 1,2,3-TCP, also detects ethylene dibromide (EDB) and 1,2-dibromo-3-chloropropane (DBCP), which have MCLs under the Federal SDWA and are also potent carcinogens and mutagens. As such, the DEP is amending the PWTA to require testing for these two analytes as well. Testing is required to start beginning March 3, 2019.

SDWA radionuclide monitoring and compliance with Federal MCLs to NTNC Water Systems –In first quarter of 2019, the DEP will require NTNC water systems to comply with the Federal MCLs and monitoring and treatment requirements for radionuclides (gross alpha, uranium, and radium). These requirements already apply to public community water systems. In accordance with its authority under the SDWA, the DEP has concluded that it is important to the protection of public health to extend these requirements to NTNC water systems, which serve at least 25 of the same persons over six months per year (and thus could expose users over long periods).

PWTA expanded testing for gross alpha and arsenic and new testing for uranium for private wells – This includes amendments to the PWTA for private wells based on sound scientific analysis including studies conducted by the United States Geological Survey and the NJ Geological and Water Survey, as well as years of NJ private well data. Amendments include the expansion of arsenic testing (previously only in Northern NJ counties) and of gross alpha testing (previously only in Southern NJ counties) that will result in Statewide testing for both contaminants. New uranium testing will be required for 12 northern counties (Bergen, Essex, Hudson, Hunterdon, Mercer, Middlesex, Morris, Passaic, Somerset, Sussex, Union and Warren). Uranium testing is necessary to identify which radiological contaminant is contributing to a high gross alpha result and to identify the correct treatment. Testing for private well-owners will occur at the time of sale of real property or every five years for rental properties. Testing is required to start beginning September 4, 2018.

One-time testing for new public non-community and non-public water systems – The SDWA establishes one-time testing requirements for newly constructed non-public and public non-community water systems to ensure that the quality of the source water is evaluated prior to use. The existing testing requirements in the SDWA rules are the same as those under the existing PWTA rules. Therefore, the DEP is adopting corresponding amendments to require expanded testing for gross alpha and arsenic, new testing for uranium in the north and testing for 1,2,3-TCP, EDB and DBCP to ensure the testing requirements in the two sets of rules are aligned.

More information as well as a copy of the rule can be found on our website at:
https://www.state.nj.us/dep/watersupply/g_reg.html