



FREQUENTLY ASKED QUESTIONS (FAQ)

Submitting PFAS Data on Monitoring Report Forms Division of Water Quality Bureau of Ground Water, Residuals and Permit Administration Ground Water Unit

The New Jersey Department of Environmental Protection (Department) has officially adopted amendments to the [Ground Water Quality Standards, N.J.A.C. 7:9C](#) (GWQS) to address perfluoroalkyl and polyfluoroalkyl substances (PFAS) in discharges to ground water.

On January 16, 2018, the GWQS were adopted with an amendment to include the specific ground water quality criterion of 0.013 micrograms per liter ($\mu\text{g/L}$) for perfluorononanoic acid (PFNA). Subsequently on June 1, 2020, the GWQS were readopted with amendments to include the specific ground water quality criterion of 0.014 $\mu\text{g/L}$ for perfluorooctanoic acid (PFOA) and 0.013 $\mu\text{g/L}$ for perfluorooctane sulfonic acid (PFOS).

In response to the adopted amendments, the Division of Water Quality began modifying New Jersey Pollutant Discharge Elimination System (NJPDES) Discharge to Ground Water (DGW) permits to include monitoring for PFOA, PFNA and PFOS.

This document has been developed to aid your facility in the proper submission of PFAS data in accordance with your NJPDES DGW permit.

For further clarification regarding this FAQ document, please contact dwq_groundwater@dep.nj.gov.

Questions and Answers are as follows:

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1. What is PFAS?

Per- and polyfluoroalkyl substances, or PFAS, are a large family of thousands of manmade chemicals that have been used in industrial and commercial applications for over 70 years. PFAS, also known as “forever chemicals,” repel water and oil and are resistant to heat and chemical reactions.

Products that may be manufactured with PFAS include, but are not limited to:

- Stain-resistant coatings for upholstery and carpets;
- Water-resistant breathable clothing;
- Greaseproof food packaging;
- Non-stick cookware; and
- Aqueous film-forming foams used for extinguishing hydrocarbon fires and in firefighter training.

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2. How do PFAS get into the environment?

PFAS enter the environment through:

- Release from industrial facilities (through wastewater or air emissions) where they are made or used
- Release during firefighting training or use in response to a petroleum-based fire event
- Sludge and effluent from wastewater treatment plants
- Contaminated liquid from landfills (leachate) where PFAS containing industrial waste or consumer products are disposed

NJDEP currently regulates PFOA, PFOS, and PFNA because it was determined that these three PFAS occur in groundwater and drinking water at levels of concern.

Although the use of long-chain PFAS such as PFOA, PFOS, and PFNA has decreased substantially, contamination is expected to continue indefinitely because these substances are extremely persistent in the environment and are soluble and mobile in water.

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3. Are there Ground Water Quality Standards (GWQS) for PFAS?

Yes, as stated above, GWQS exist for PFNA, PFOA and PFOS. The table below displays the GWQS for these PFAS compounds in both micrograms per liter (µg/L) or parts per billion (ppb) and nanograms per liter (ng/L) or parts per trillion (ppt). For reference, 1 µg/L (ppb) = 1,000 ng/L (ppt). Please refer to question 12 for more details on converting units. The GWQS can be viewed at [Ground Water Quality Standards, N.J.A.C. 7:9C](#).

PFAS Parameter	GWQS µg/L (ppb)		GWQS ng/L (ppt)
Perfluorononanoic acid (PFNA)	0.013 µg/L (ppb)	=	13 ng/L (ppt)
Perfluorooctanoic acid (PFOA)	0.014 µg/L (ppb)	=	14 ng/L (ppt)
Perfluorooctane sulfonic acid (PFOS)	0.013 µg/L (ppb)	=	13 ng/L (ppt)

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4. Is my facility required to monitor for PFAS?

Part III of your NJPDES DGW permit will indicate the PFAS parameters required to be analyzed and reported to the Department. Part III will also indicate the frequency at which PFAS sampling is required.

Example Waste Characterization Report (WCR) form

MONITORED LOCATION: R01R Dis Mon Pt ROCK FORMATION: Cohansey DISCHARGE CATEGORY(IES): GW - Discharge to Groundwater

Location Description
Discharge sample R01R shall be taken at a point prior to disposal.

Contributing Waste Types
Sanitary

Frequency → **GW Discharge WCR - Annual Reporting Requirements:**
Submit an Annual WCR: due 25 calendar days after the end of each year.

Table III - C - 1: GW Discharge WCR - Annual Limits and Monitoring Requirements

PHASE: Final PHASE Start Date: 01/01/2021 PHASE End Date:

Parameter	Sample Point	Compliance Quantity	Units	Sample Type	Monitoring Period
PFOA	Effluent Gross Value	REPORT	UG/L	Grab	January thru December
PFNA	Effluent Gross Value	REPORT	UG/L	Grab	January thru December
PFOS	Effluent Gross Value	REPORT	UG/L	Grab	January thru December

Parameters →

Example Discharge Monitoring Report (DMR) form

Ground Water DMR Reporting Requirements:
Submit a Monthly DMR: due 25 calendar days after the end of each month.

Comments:
R02R. For onsite disposal.

Table III - B - 1: Ground Water DMR Limits and Monitoring Requirements

PHASE: Final PHASE Start Date: PHASE End Date:

Parameter	Sample Point	Limit	Limit	Units	Limit	Limit	Limit	Units	Frequency	Sample Type
Perfluorooctane Sulfonic Acid (PFOS)	Effluent Gross Value	****	****	****	****	****	REPORT Instant Maximum	UG/L	1/Quarter	Grab
January thru December	QL	***	***		***	***	***			
Perfluorooctanoic Acid (PFOA)	Effluent Gross Value	****	****	****	****	****	REPORT Instant Maximum	UG/L	1/Quarter	Grab
January thru December	QL	***	***		***	***	***			
Perfluorononanoic Acid (PFNA)	Effluent Gross Value	****	****	****	****	****	REPORT Instant Maximum	UG/L	1/Quarter	Grab
January thru December	QL	***	***		***	***	***			

Parameter →

Frequency ↙

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5. How do I find a list of certified laboratories?

A list of certified laboratories can be obtained at <https://njems.nj.gov/DataMiner>. Please select “Search by Category”, submit the Report Category “Certified Laboratories”, and select the report entitled “PFAS Non-Potable Water Certified Laboratories”. The NJPDES permit requires that the samples be analyzed by a New Jersey certified laboratory certified for a non-potable water (NPW) user-defined method that can quantify the required PFAS in wastewater.

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6. What method shall be used for analysis?

The Department encourages the use of “User defined EPA Draft 1633” or similar method, however, any New Jersey certified Laboratory with an approved “user-defined” method of analysis for PFAS in non-potable water (NPW) can be utilized.

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7. How should PFAS monitoring data be submitted?

Monitoring data should be submitted in the same manner as other data required to be submitted as part of your facility’s active New Jersey Pollutant Discharge Elimination System (NJPDES) Discharge to Ground Water (DGW) permit. All data should be submitted via the Department’s Online Portal - [NJDEP Online](#). If your facility has not done so already, you are encouraged to register. For more information on the Department’s online portal system, please visit <https://www.nj.gov/dep/dwq/mrf.htm>. This site provides written and video guidance on the NJPDES MRF Submission Service. Training Videos, which will walk you through the sign up and MRF submission process, include modules on the following topics:

- Part 1: Registration for NJDEP Online Services
- Part 2: Adding a Facility/Permit to My Workspace
- Part 3: Adding a Facility/Permit to My Workspace from the MRF Service
- Part 4: Overview of the Manage MRF Services Screen
- Part 5: Completing an Electronic DMR
- Part 6: Completing an Electronic WCR
- Part 8: Notifying Responsible Officials of MRFs Awaiting Certification
- Part 9: Certifying MRFs
- Part 10: Correcting MRFs
- Part 11: Managing Users Through Facility Administration

If you are in need of assistance, please contact the Ground Water Unit via email at dwq_groundwater@dep.nj.gov or by phone at (609) 984-4428 and reference the ‘NJPDES MRF Submission Service’ in your inquiry.

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8. What type of Monitoring Report Form (MRF) should the required PFAS sampling data be submitted on?

Part III of your facility's NJPDES DGW Permit will identify the type of form your PFAS data must be submitted on. PFAS monitoring results shall be submitted on either a Discharge Monitoring Report (DMR) form or a Waste Characterization Report (WCR) form as indicated in Part III of your NJPDES DGW permit.

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9. What units should PFAS data be submitted in?

Part III of your facility's NJPDES DGW Permit will identify the units your PFAS data must be submitted in. This will be either µg/L or ng/L.

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10. What are nanograms per liter (ng/L) and micrograms per liter (µg/L) equivalent to?

Nanograms per liter (ng/L) are equivalent to parts per trillion (ppt). PFAS data will most likely be represented in ng/L (ppt) on laboratory reports. Micrograms per liter (µg/L) are equivalent to parts per billion (ppb). PFAS is represented in µg/L in the Ground Water Quality Standards (GWQS).

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11. What if the PFAS results on the laboratory sheets are in different units than what is required in my NJPDES DGW Permit?

If the units on the laboratory sheets are different from the units required in your NJPDES permit, a conversion to the correct units must be conducted before data is submitted to the Department. This will prevent the potential appearance of under or over-reporting of PFAS concentrations and misrepresentation that data may be at levels above the GWQS.

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12. How do I convert nanograms per liter (ng/L) and micrograms per liter (µg/L)?

If the units on the laboratory sheet are different from the units required in your NJPDES DGW permit, a conversion to the correct units must be conducted before data is submitted to the Department. For reference, 1 µg/L (ppb) = 1,000 ng/L (ppt). To prevent errors, the below conversion calculator is encouraged to be utilized when conversions are necessary prior to PFAS data reporting.

ng/L	ug/L

ug/L	ng/L

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13. How do I report results on the Monitoring Report Form?

The report provided by the laboratory that conducted the sample analysis will indicate each PFAS analyte result concentration. Before reporting results, always ensure that the numeric value is in the correct units. Please refer to Question 11 above regarding unit conversion. Below are three (3) separate scenarios that should be reviewed before submitting PFAS results.

Scenario 1:

If the result is a detected numeric value and does not contain a qualifier (letter) after the result (i.e., 4.7), report the indicated numeric value on the MRF.

Example: If the result is 4.7 ng/l, the result reported on the MRF should read 4.7 ng/l or 0.0047 µg/l (depending on units required in your NJPDES permit and noted on your MRF).

Scenario 2:

If the result is a numeric value that is greater than the method detection limit (MDL) but less than the Reporting Limit (RL), then report < the numeric value that is the RL on the report form (this type of result is usually followed by a qualifier such as “J”). The RL is found on the laboratory report and may be identified as “RL” or “QL”.

Example: If the result is 1.3 J ng/l, the MDL is 1 ng/l, and the RL is 2 ng/l, the result reported on the MRF should read <2 ng/l or <0.002 µg/l (depending on units required in your NJPDES permit and noted on your MRF).

Scenario 3:

If the result on the laboratory report is indicated as Non-Detect (ND), please enter “<” followed by the numeric value that is the RL. The RL is found on the laboratory report and may be identified as “RL” or “QL”.

Example: If the result is ND, and the RL is 2 ng/l, the result reported on the MRF should read <2 ng/l or <0.002 µg/l (depending on units required in your NJPDES permit and noted on your MRF).

Footnotes:

"Method detection limit" (MDL) means the minimum concentration of a substance that can be measured and reported with 99% confidence that the analyte concentration is greater than zero and is determined from analysis of a sample in a given matrix containing the analyte.

“Reporting Limit” (RL) or “Quantitation Level” (QL) and means the smallest concentration (or amount) of analyte, that can be quantified with statistical rigor and reported by a laboratory.

“J” after a numeric value indicates an estimated value.

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14. Who do I contact if I have questions?

Further questions can be directed to dwq_groundwater@dep.nj.gov.

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