

**STATE OF CALIFORNIA  
STATE WATER RESOURCES CONTROL BOARD  
DIVISION OF DRINKING WATER**

**ORDER DW 2022-0001-DDW**

**GENERAL ORDER REQUIRING MONITORING FOR PER AND  
POLYFLUOROALKYL SUBSTANCES  
*CALIFORNIA HEALTH AND SAFETY CODE SECTION 116378***

The State Water Resources Control Board (“State Water Board” or “Board”), acting by and through its Division of Drinking Water (“Division”), hereby issues General Order No. DW 2022-0001-DDW (hereinafter “Order”) pursuant to section 116378 of the Health and Safety Code, as set forth below:

1. WHEREAS, Assembly Bill 756 (2019-Garcia), approved by the Governor on July 31, 2019, and codified as Health and Safety Code section 116378, authorizes the State Water Board to require public water systems to monitor for per and polyfluoroalkyl substances (“PFAS”), in accordance with conditions set by the Board; and
2. WHEREAS, Health and Safety Code section 116378, subdivision (a) requires a laboratory that has accreditation or certification pursuant to Article 3 (commencing with Section 100825) of Chapter 4 of Part 1 of Division 101 of the Health and Safety Code to perform the analysis of any material required by an order issued pursuant to Health and Safety Code section 116378; and
3. WHEREAS, an order issued pursuant to Health and Safety Code section 116378 may apply to an individual public water system, specific groups of water systems, or to all public water systems; and

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4. WHEREAS, pursuant to Health and Safety Code section 116378, Chapter 3.5 (commencing with Section 11340) of Part 1 of Division 3 of Title 2 of the Government Code does not apply to an order issued to groups of public water systems or all public water systems; and
5. WHEREAS, Health and Safety Code section 116378, subdivision (c)(1) states that if monitoring results in a confirmed detection, then a community water system or a nontransient-noncommunity water system must report that detection in the annual consumer confidence report. Section 116378, subdivision (c)(1) further states that unless the water source is taken out of use or new data becomes available to show that the applicable response level is no longer being exceeded, the community or nontransient-noncommunity water system will provide notice of the exceedance of the response level in the water system's consumer confidence report; and
6. WHEREAS, Health and Safety Code section 116378, subdivision (c)(2) states that in addition to the notice required by subdivision (c)(1), for PFAS with notification levels, a community water system or nontransient-noncommunity water system must report a detection which exceeds the notification level as required by Health and Safety Code section 116455; and
7. WHEREAS, Health and Safety Code section 116378, subdivision (c)(3) states that for PFAS with response levels where detected levels of a substance exceed the response level, a community water system or nontransient-noncommunity public water system must take the water source out of use, provide treatment or blending of the source, or provide public notification as specified therein; and
8. WHEREAS, among other things, Health and Safety Code section 116455 requires that within 30 days of a confirmed detection of a contaminant found in drinking water delivered by a public water system for human consumption that is in excess of a notification level set by the State Water Board, the public water

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system which supplies water directly to the end user must notify the public water system's governing body and the governing body of any local agency whose jurisdiction includes areas supplied with drinking water by the water system. A local agency means a city or county. If the water system is a water company regulated by the California Public Utilities Commission ("Commission"), then the water system must also notify the Commission; and

9. WHEREAS, on August 22, 2019, pursuant to Health and Safety Code section 116455, the State Water Board: (1) updated the notification level for perfluorooctanoic acid ("PFOA") from 0.000014 mg/L to 0.0000051 mg/L; (2) updated the notification level for perfluorooctanesulfonic acid ("PFOS") from 0.000013 mg/L to 0.0000065 mg/L ; and
10. WHEREAS, on August 22, 2019, the Division requested the development of Public Health Goals (PHG) from the Office of Environmental Health and Hazard Assessment (OEHHA) for PFOA and PFOS; and
11. WHEREAS, on February 6, 2020, pursuant to Health and Safety Code section 116455, the State Water Board: (1) changed the response levels from a total combined PFOA and PFOS concentration of 0.000070 mg/l to 0.000010 mg/L for PFOA and 0.000040 mg/L for PFOS; and
12. WHEREAS, on March 5, 2021, pursuant to Health and Safety Code section 116455, the State Water Board established a perfluorobutane sulfonic acid (PFBS) notification level of 0.0005 mg/L and response level of 0.005 mg/L; and
13. WHEREAS, on October 31, 2022, pursuant to Health and Safety Code section 116455, the State Water Board established a perfluorohexane sulfonic acid (PFHxS) notification level of 0.000003 mg/L and response level of 0.00002 mg/L; and
14. WHEREAS, the State Water Board previously issued Orders DW 2020-0003 and DW 2021-0001 to various parties to monitor for PFAS; and

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15. WHEREAS, the State Water Board intends, through this Order, to update the monitoring requirements for PFAS, based on the results of monitoring to date; and

16. WHEREAS, by and through this Order, the State Water Board is exercising its authority under Health and Safety Code section 116378 to require those public water systems listed in Exhibit A to this Order to monitor for PFAS in accordance with the conditions set forth below.

THEREFORE, the State Water Board, by and through its Division of Drinking Water, hereby expressly and completely rescinds Order DW 2021-0001 and Order DW 2020-0003 in their entirety and orders that the public water systems listed in Exhibit A to this Order, and if not listed, receives at a later date a Notice of Applicability, monitor for PFAS as follows:

1. On or before March 31st, 2023, collect a sample from the sources listed in Exhibit A to be analyzed for PFAS. Samples must be collected at least once each calendar quarter thereafter.
2. Public water systems that receive a permit amendment from DDW to treat for PFAS which specifies on-going PFAS monitoring requirements may submit a request to their DDW District Engineer for a modification or waiver to the monitoring required under this Order.
3. Samples collected must be analyzed using a laboratory accredited by the California Environmental Laboratory Accreditation Program (ELAP) for analysis of PFAS using EPA Method 533. The laboratory must conduct and report electronically a complete analysis for all PFAS analytes under EPA Method 533.
4. A PFAS detection is a positive finding of a quantifiable amount above the established detection level requirement for any PFAS analyte tested pursuant to this Order. For the purposes of meeting the requirements in Health and Safety Code section 116378, the established detection level requirement for each PFAS

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analyte will be identified as the Consumer Confidence Report Detection Level (CCRDL). The detection level requirement for each PFAS constituent for which monitoring is required in this Order is identified by the State Water Board and attached to this Order.

5. If a laboratory reports the detection of PFAS in any sample at a concentration greater than the established detection level, the water system will have the option of collecting one or two confirmation samples within 30 days of being notified of the initial detected result by the laboratory.
6. If a PFAS detection is followed by a confirmation sample with a result less than the reporting level, a second confirmation sample may be taken by the water system. Both the first and second confirmation samples must be collected within 30 days of the notification by the laboratory of the initial detected sample result. An initial detected result will be disregarded if both confirmation samples do not show the detection of the PFAS contaminant. If no confirmation sample – or only one confirmation sample – is collected, the initial detection must be presumed to be confirmed.
7. If the PFAS detection is confirmed, results of the initial and confirmation samples will be averaged to determine if the confirmed detection is greater than the applicable notification level and/or response level. For calculation purposes, a result below the established detection level will be assigned a value of zero when averaging.
8. If the PFAS detection is confirmed, the detection must be reported in the water system's annual consumer confidence report.
9. If two consecutive quarters of testing results are below those listed on the CCRDL attached, the public water system may submit a request to their DDW District Engineer for a modification or reduction in monitoring.

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10. If the results of a PFAS detection are confirmed to exceed a notification level, the water system must report the detection as required by Health and Safety Code section 116455. Section 116455 notification is required within 30 days after the water system is first informed by the laboratory of a confirmed detection of the contaminant that exceeds the notification level. As required by section 116455, if the public water system is a retail water system, then the person operating the retail water system must notify the retail water system's governing body and the governing body of any local agency whose jurisdiction includes areas supplied with drinking water by the retail water system. If the public water system is a wholesale water system, then the person operating the wholesale water system must notify the wholesale water system's governing body and the water systems that are directly supplied with that drinking water.
11. The specific methodology to determine response level exceedances is dependent on the PFAS analyte and health endpoint. An exceedance may be determined by calculating a quarterly running annual average (QRAA), a single or confirmed sample, or as prescribed in the PFAS analytes Notification Level Issuance by DDW. To determine whether monitoring shows an exceedance of a response level, refer to the appropriate methodology of the PFAS analyte. Exhibit B provides a summary of this information but may not be inclusive as new advisory levels are issued.
12. To determine whether monitoring shows an exceedance of a response level for those PFAS analytes that do not use the QRAA method, either a single sample or a confirmed sample is used to determine if the response level is exceeded. Except for PFHxS, if laboratory analysis detects the presence of a constituent in any sample above the response level, the water system will have an option to conduct a confirmation sample within 30 days of being notified of the result by the laboratory. If a confirmation sample is collected and analyzed, all results will

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be averaged. For PFHxS, if laboratory analysis detects the presence of a constituent in any sample above the response level, the water system will not have an option to conduct a confirmation sample and can request to the laboratory the use of the field duplicate to confirm the results. If the duplicate is analyzed, the result will be averaged.

13. To determine whether monitoring shows an exceedance of a response level for those PFAS analytes using the QRAA method, the water system must calculate a quarterly running annual average (QRAA). The QRAA means the average of sample results taken at an individual source, treatment effluent, or delivered water locations for the identified source during four calendar quarters. The QRAA is re-calculated each quarter using the most recent four quarters of results. A single sample may result in the exceedance of the response level. If any sample would cause the QRAA to exceed a response level, the water source would be deemed to have exceeded the response level. If sampling has just begun and there are less than 4 quarters of results to average, then the other quarters will be considered to have a zero value and the quarterly results would be divided by four. If a system takes more than one sample in a quarter, the average of all the results for that quarter must be used when calculating the running annual average. If a system fails to complete four consecutive quarters of monitoring, the running annual average must be based on an average of the available data by dividing the available data by the number of quarters for which data is available.
14. If any monitoring is undertaken pursuant to this Order results in a concentration of PFAS in the water entering the distribution system that exceeds a response level, the water system must either (1) take the source out of service immediately; (2) utilize treatment or blending; or (3) provide public notification of

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the response level exceedance. Additionally, the exceedance of the response level must be reported in the annual consumer confidence report.

15. In addition to the sources listed in this Order, public water systems that provide treatment (example, blending, granular activated carbon, ion exchange, or reverse osmosis treatment) can also sample the treated or delivered water to determine notification requirements. If treated water or delivered water samples are proposed to be collected, please contact the local DDW district office for input on sampling location and configuration.

16. Public notification for community or nontransient-noncommunity water systems that are delivering water exceeding a response level must meet the requirements of Health and Safety Code section 116378 and either take the source out of use or complete the public notification requirements.

17. The results of all analyses conducted pursuant to this Order must be reported to the Board by the analyzing laboratory using the EDT (Electronic Data Transfer) process in accordance with Section 64469 of Title 22 of the California Code of Regulations. Analytical results must be reported no later than the 10th day of the month following the completion of the analysis.

The State Water Board reserves the right to make modifications to this Order as it may deem necessary to protect public health and safety. Such modifications must be issued as amendments to this Order and must be effective upon issuance.

### **SEVERABILITY**

The requirements of this Order are severable, and each public water system listed in Exhibit A must comply with each and every provision thereof notwithstanding the effectiveness of any provision.



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**FURTHER ENFORCEMENT ACTION**

The California Safe Drinking Water Act authorizes the State Water Board to issue a citation or order with the assessment of administrative penalties to a public water system for violation or continued violation of the requirements of the California Safe Drinking Water Act or any regulation, permit, standard, citation, or order issued or adopted thereunder including. The California Safe Drinking Water Act also authorizes the State Water Board to take action to suspend or revoke a permit that has been issued to a public water system if the public water system has violated applicable law or regulations or has failed to comply with an order of the State Water Board, and to petition the superior court to take various enforcement measures against a public water system that has failed to comply with an order of the State Water Board.



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Darrin Polhemus, Deputy Director  
State Water Resources Control Board  
Division of Drinking Water

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October 31, 2022

Date

Exhibit A – List of Sources Subject to General Order DW 2022-0001-DDW  
Exhibit B - Consumer Confidence Report Detection Levels (CCRD) and Advisory Levels