PROPOSED



NOTIFICATION LEVEL ISSUANCE

Contaminant(s):	perfluorobutane sulfonic acid (PFBS)
Notification Level:	0.0005 milligrams per liter
Response Level:	0.005 milligrams per liter
Analytical Method:	EPA Method 537.1 or EPA Method 533
Toxicological Endpoint:	reduction of the thyroid hormone, thyroxine (T4), in pregnant female mice

FINDINGS:

- Health and Safety Code section 116455 provides the State Water Resources
 Control Board's Division of Drinking Water (DDW) the authority to issue notification
 and response levels for contaminants in drinking water delivered for human
 consumption before a maximum contaminant level has been set.
- 2. Notification levels are nonregulatory, health-based advisory levels for contaminants that are established as precautionary measures for contaminants.
- 3. Response levels are established in conjunction with notification levels and represent the concentration of a drinking water contaminant at which additional steps, beyond notification, are recommended to reduce public exposure.
- 4. The establishment of a notification level does not require public water systems to monitor for the contaminant, except when water systems are subject to the recycled water regulations. Some water systems, however, will sample for constituents in addition to those contaminants for which there are MCLs, and if those monitoring results indicate that a notification level has been exceeded, the water system must comply with Health and Safety Code section 116455. In addition to those requirements, DDW recommends that a public water system inform its customers and consumers about the presence of the contaminant and any health concerns associated with exposure.
- 5. Since the early 1980s, notification levels (known as "action levels" through 2004) for 93 contaminants have been established. Of those, 40 have gone through the formal regulatory process and now have MCLs. Currently there are 31 chemicals

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with notification levels. In addition, another 24 chemicals have archived advisory levels. For more information:

https://www.waterboards.ca.gov/drinking_water/certlic/drinkingwater/NotificationLevels.html

- 6. PFBS is a member of a large class of chemicals known as per- and polyfluoroalkyl substances (PFAS). The contamination of drinking water with PFAS has become an increasing concern due to the tendency of PFAS to accumulate in groundwater. PFBS is a four-carbon fluorocarbon with a functional group that acts as anionic surfactant that can be used in numerous commercial products to offer water- and stain-repellent properties. PFBS was developed and manufactured to replace toxic eight-carbon chain perfluorocarbon sulfonate (PFOS).
- 7. In February 2020, DDW requested that the Office of Health Hazard and Assessment (OEHHA) prepare a recommendation for a notification level for PFBS.
- 8. In January 2021, OEHHA provided a recommended notification level for PFBS reference in drinking water based on thyroid hormone reduction in pregnant mice. The level of 0.5 μ g/L (microgram/liter) or parts per billion (ppb) represents the concentration of PFBS in drinking water that would not pose any significant health risk.
- 9. On March XX, 2021, DDW established a notification of 0.5 parts per billion (ppb) and a response level of 5 ppb for PFBS.
- 10. Response levels are established at 10 times the established non- cancer risk threshold. A level 10 times the toxicological endpoint is consistent with an acceptable margin of safety.
- 11. Health and Safety Code section 16378 requires community water systems and nontransient noncommunity public water systems where detected levels of perfluoroalkyl substances and polyfluoroalkyl substances exceed response levels to take the affected water sources out of use or provide public notification within 30 days of the confirmed detection.

Approved:

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

Date