

ANNOUNCEMENT OF PUBLICATION OF PUBLIC HEALTH GOALS AND AVAILABILITY OF TECHNICAL SUPPORT DOCUMENT FOR NITRATE AND NITRITE IN DRINKING WATER

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The Office of Environmental Health Hazard Assessment (OEHHA) of the California Environmental Protection Agency is announcing the publication of updated Public Health Goals (PHGs) for nitrate and nitrite in drinking water. A PHG is the level of a drinking water contaminant at which adverse health effects are not expected to occur from a lifetime of exposure. The California Safe Drinking Water Act of 1996¹ requires OEHHA to develop PHGs based exclusively on public health considerations.² PHGs published by OEHHA are considered by the State Water Resources Control Board in setting drinking water standards (Maximum Contaminant Levels, or MCLs) for California.³

The technical support document, available for download below, presents an update of the nitrate and nitrite PHGs. A review of the scientific literature published since the development of the original nitrate and nitrite PHGs in 1997 has identified no new information to support changing the current PHGs of 45 parts per million (ppm) for nitrate and 3 ppm for nitrite. Nitrate and nitrite can also be expressed in terms of their concentrations as nitrogen. When expressed as nitrogen, 45 ppm nitrate is equivalent to 10 ppm nitrogen. The PHG of 3 ppm for nitrite is 1 ppm when expressed as nitrogen. The PHGs for nitrate and nitrite expressed as nitrogen have not changed. The combined nitrate/nitrite PHG of 10 ppm (as nitrogen), which accounts for the additive toxicity of nitrate and nitrite, also remains unchanged. It does not replace the individual values, and the maximum contribution from nitrite should not exceed 1 ppm nitrite-nitrogen. These PHGs protect against the occurrence of infant methemoglobinemia, a blood disorder that results in decreased oxygen distribution to tissues, as well as other effects, such as liver toxicity, that have been shown to occur at higher levels of exposure and in the general population.

A companion document, also available for download below, contains responses to public comments received during the first of two public comment periods that ended in February 2017 and March 2018, and comments received in June 2017 from an external scientific peer review. OEHHA has evaluated all of the comments and revised the technical support document as appropriate.

¹ Codified at Health and Safety Code, section 116270 et. seq.

² Health and Safety Code section 116365(c)

³ Health and Safety Code section 116365(a) and (b)

If you would like to receive further information on this announcement or have questions, please contact Hermelinda Jimenez at PHG.Program@oehha.ca.gov or at (916) 324-7572. Written inquiries can also be addressed to:

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