A. Purpose

The purpose of this policy is to establish the policy and procedures to proactively monitor Group B public water supplies with elevated nitrates in order to prevent drinking water contamination or exposure to contaminated water supplies.

Water resource data shows that the average background level of nitrates in most of Kitsap County is less than 1 mg/L. The maximum contaminant level (MCL) for nitrate in drinking water is set by EPA at 10.0 mg/L. Drinking water with levels of nitrate above the MCL can cause methemoglobinemia (blue baby syndrome) in susceptible individuals and has been linked to non-Hodgkin’s Lymphoma. Elevated nitrates in groundwater are commonly associated with failing on-site sewage systems, animal waste runoff, and misuse or excessive application of chemical fertilizers. Highly permeable soils are also a contributing factor.

The EPA and the State Department of Health have set the threshold of 5.0 mg/L for Group A water systems as the benchmark which quarterly monitoring is required.

B. Policy Statement

The Kitsap Public Health District oversees and regulates Group B Water Systems. The following policy and procedure will be followed as monitoring results for Group B water systems are reviewed.

C. Implementing Procedures

1. All Group B water systems shall be directed to begin quarterly monitoring when the average of their last two nitrate samples reaches 5.0 mg/L. Standard three year sampling can be conducted if the average of two years (eight quarters) of sampling is below 5.0 mg/L.

2. The water system will be required to apply for Health District staff to conduct a sanitary survey to help identify possible sources/pathways for nitrate contamination. Health District staff will work with water purveyors and water system users to restrict, reduce, or eliminate activities which are contributing to the elevated nitrates.

3. If the MCL of 10.0 mg/L is exceeded, the water purveyor will notify consumers and take actions in accordance with Section 10.C. of Ordinance 2018-01.
a. Either a replacement source must be developed or a water treatment device designed by a licensed professional engineer and approved by the Health District must be installed.

D. Policy Review History

Initial Approval 8/13/2019