

## Ground Water Monitoring Policy

### Background

On-site sewage treatment systems (septic systems) can be a source of contamination of ground water and surface water and pose a public health risk.

Information concerning soil and site conditions is needed for the design of a subsurface wastewater treatment system. Elements that must be included in the evaluation are:

- Soil profiles
- Soil permeability
- Depth to ground water, bedrock or other limiting layer
- Land slope and topographic position
- Flooding potential
- Amount of suitable area available
- Setback distances

The Flathead County Construction Standards for Subsurface Wastewater Treatment Systems (Construction Standards) set forth the requirements for the design and preparation of plans and specifications for subsurface wastewater treatment systems.

Section 2.1.8.4 (Ground Water and Surface Water Quality Impact) of the Construction Standards states:

*When required, ground water observation must be conducted in accordance with Appendix C.*

Appendix C of the Construction Standards titled "Ground Water Observation Well Installation and Measuring Procedures" defines:

- Frequency of monitoring (including that at least two weeks before and after ground water peak must be monitored)
- Guidelines for refusal of data during drought years
- Where to install
- Installation process
- Measuring procedures
- Decommissioning of observation wells

The Flathead City-County Board of Health desires to establish a policy that clearly defines the ground water monitoring application process in Flathead County.

### Policy

The Board believes that ground water monitoring application processes in Flathead County should be clearly defined to ensure consistency. This policy supplements Appendix C (Ground Water Observation Well Installation and Measuring Procedures) of the Construction Standards.

### Procedure

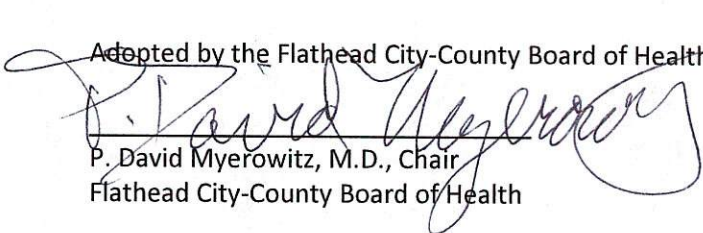
The following criteria will be utilized by the Department to determine if ground water monitoring is required:

- 1) Nature of the soil condition at the proposed building site
- 2) Geomorphic and topographic characteristics at the proposed building site
- 3) Evidence of seasonally high ground water, observed ground water, wetland vegetation or irrigation
- 4) Historical information from past ground water monitoring

If ground water monitoring is deemed necessary:

- The Ground Water Monitoring Form and a site plan indicating all the ground water observation well sites (identified by number) must be completed and submitted to the Department by March 15<sup>th</sup> of the monitoring year.
- Applications received after March 15<sup>th</sup> will only be accepted if the monitoring includes observations at least two weeks prior to and, two weeks after, the ground water peak elevation.
- All required documents must be submitted and approved by the Department prior to the beginning of monitoring.
- The owner or their representative is responsible for locating, installing and monitoring the well(s).
- Department staff will conduct spot checks, at least once a month, on all approved observation wells.
- Ground water monitoring may be associated with an application for a site evaluation by the Department or a subdivision application. This method is recommended, as it allows a soil evaluation to be completed at the same time as the installation of the monitoring well(s).
- A parcel may not be re-monitored unless the area of the proposed ground water observation well(s) is located geographically or topographically unique from the previous well location(s).
- Ground water monitoring results are valid in future years unless site conditions change in a way that could affect the level of ground water (e.g. installation of an irrigation ditch on the property).
- If monitoring is not completed according to the specified schedule or, if the data is found to be inaccurate, monitoring must be repeated in a subsequent year
- All monitoring records must be submitted to the Department by August 1<sup>st</sup> of the monitoring year.

Adopted by the Flathead City-County Board of Health on: February 15, 2018.

  
P. David Myerowitz, M.D., Chair  
Flathead City-County Board of Health