

## **Groundwater Monitoring (For Tanks and Piping)**

### **Description of Release Detection:**

Groundwater Monitoring (GM) uses permanent monitoring wells to detect the presence of liquid product floating on groundwater at an underground storage tank (UST) facility. Detection devices may be permanently installed in wells for automatic, continuous measurement. Manual detection devices are also acceptable and include the use of a bailer to collect a liquid sample for visual inspection. A site assessment by a trained professional should be conducted before the wells are installed. The site assessment determines the soil type, groundwater depth, direction of groundwater flow, and the general geology of the site. For this method to be employed, groundwater can never be more than 20 feet from the ground surface, and must always remain accessible within the well for monitoring.

### **Operating and Maintaining a GM System:**

- Use a GM system to check for leaks at least once every 30 days.
- Periodically have a qualified UST contractor service the GM system components according to the manufacturer's service instructions.
- At a minimum, annual operability check for proper function of hand-held monitoring devices is required, including but not limited to bailers.
- Use the owner's manual for operation and maintenance procedures.
- Make sure employees who run, monitor, or maintain the GM system know exactly what they have to do and to whom to report problems.
- Keep GM wells clearly marked and secured.
- Groundwater Monitoring can only be used if the stored substance floats on top of water and does not easily mix with water.

### **Record Keeping:**

- Keep results of the GM system activity for at least one year. At a minimum, a written log must be kept indicating release detection results at least once every 30 days.
- Keep all records of calibration, maintenance, and repair of release detection equipment for at least one year.
- All facilities conducting monthly groundwater monitoring for release detection must have a valid site assessment. All new site assessments developed after May 26, 2017 must be signed by a P.E., P.G. or equivalent licensed professional with experience in environmental engineering, hydrology or other relevant technical discipline.
- Records of site assessments for groundwater and vapor monitoring must be on file by May 26, 2020.

**If the GM system result indicates a release may have occurred, call the UST Management Division within 24 hours at (803) 898-0589.**