

UNITED STATES DEPARTMENT OF AGRICULTURE
NATURAL RESOURCES CONSERVATION SERVICE

353– MONITORING WELL
OPERATION AND MAINTENANCE

Sponsor/Land user: _____ Date: _____

Address: _____

Location GPS Coordinates Map Datum: _____ E _____ N _____

Quad Sheet Name _____ SEC _____ T _____ R _____

This project was designed and installed to obtain representative ground water quality samples and hydrogeologic information to document proper function of nearby animal waste storage or treatment facilities, and to identify groundwater contamination from these facilities if and when it occurs.

A properly operated and maintained monitoring well is an asset to your operation. All wells will eventually require some degree of maintenance or rehabilitation, regardless of construction methods or materials used. This time span depends on many factors, including aquifer characteristics, ground water quality, well design and materials, and well installation procedures. Timely maintenance specifically designed for the well will sustain performance and prolong the life of the installation.

This checklist is provided for your convenience in order to help you develop a good maintenance plan.

GENERAL RECOMMENDATIONS

- Keep accurate, detailed records pertaining to monitoring well planning, design, construction, and operation. Complete the Well Completion Report, file a copy with DWR, and retain a copy for your files. Retain copies of all information about the hydrogeologic conditions around the wellsite, as well as any design calculations and assumptions.
- All fences, warning signs, and/or other barriers around the well's buffer zone shall be maintained to prevent unauthorized human, vehicle, or livestock entry.
- Keep the area surrounding the well clear of brush, debris, and waste materials.
- Check the concrete pad and any visible grout seals for cracking or settlement.
- Keep the wellhead cover locked when not in use, to prevent unauthorized access.
- Inspect the well yearly and repair or replace any wellhead protection components that have been damaged or are otherwise not functioning properly. Provide a temporary cover over the well whenever repair work is interrupted by such events as overnight shutdown, poor weather, delayed acquisition of permanent equipment, or testing or sampling requirements.

- Inspect project area after heavy rains or unanticipated freezes. Promptly repair any damage, and install measures as needed to avert future damages.
- Inspect for damage from rodents or burrowing animals. Repair any damage. Take appropriate corrective actions to avert further damage.
- Check the level of aggregate in filter-packed wells and refill with new material as needed.
- Regularly review monitoring data, and identify anomalous results that indicate potentially impaired well function due to structural damages and/or altered subsurface conditions. In particular, look for variations in water level and volume, turbidity, and sand content. Collect more information as needed to isolate the problem(s) and follow up with repairs, rehabilitation, and/or decommissioning as needed.
- Rehabilitate monitoring wells whose yield has been impacted by intrusion or clogging of the screen, filter pack, and/or water-bearing strata adjoining the well. Potentially feasible rehabilitation methods include mechanical surging, backwashing, or surging by alternately starting or stopping a pump, surging with air, water jetting, sonic cleaning, chemical treatment, or a combination of these.

SPECIFIC RECOMMENDATIONS FOR YOUR PROJECT

CONTACT YOUR LOCAL NATURAL RESOURCES CONSERVATION SERVICE OFFICE FOR ANY ADDITIONAL TECHNICAL ASSISTANCE YOU MIGHT NEED FOR IMPLEMENTATION OF THIS OPERATION AND MAINTENANCE PLAN FOR YOUR MONITORING WELL.