Texas Commission on Environmental Quality Public Drinking Water Section

# Ground Water Rule Triggered Source Monitoring Plan

## Checklist H

Wells Representative of Other Wells in the same Hydrogeologic Setting. This relates to situations in which a system has multiple wells and some are so similar in construction and use of the same aquifer that a reasonable case could be made that one well may be representative of other well(s) with regard to the risk of fecal contamination. In this case, one or more of the wells would be sampled as representative of the other wells. The required information for TSMP review includes:

1. Detailed map(s) of distribution system showing the locations of:
   1. Each active well, labeled with public water system (PWS) well name/number and TCEQ Water Source Code;
2. A table of active water wells in the PWS listing:
   1. The name/number of the well;
   2. Operational status of the well (active, demand (seasonal), emergency only used for short emergency use)), etc.;
   3. TCEQ water source code used for the well;
   4. Well depth;
   5. Completed well drill date;
   6. Well discharge in gallons per minute.
3. An appendix of water well reports for each well including:
   1. Water well construction information listing all information required on a State of Texas Water Well Report or detailed material setting prepared by the drilling company;
   2. Description of geological units encountered during drilling including, but not limited to: description of each geologic unit, top depth and bottom depth; problems encountered during drilling that unit (lost circulation or returns; fractures, caves, etc.);
   3. Geophysical logs for wells, if available.

Note: If detailed well construction information is not available, then consideration of this well for representative monitoring will be denied.

1. Well locations:
   1. Latitude and Longitude coordinates (format: decimal degree OR degree, minute, second, decimal second), and horizontal datum using Global Positioning System technology;

OR

* 1. Detailed, scaled site map with all site features labeled;

OR

* 1. Well(s) labeled and plotted on a recent air photo image.

1. Water chemistry data:

If the PWS would like to provide water chemistry data to support the conclusion that two wells are drawing water from the same aquifer, the PWS should collect raw-water samples (sample point prior to any treatment or disinfection) from each well and analyzed for dissolved minerals (normal dissolved cations and anions) with pH and temperature collected at the time the sample was collected at the wellhead. The samples should be taken from each well within a short period of time. The wells should be pumped long enough to ensure the sample consists of water derived from the aquifer and not stagnant water in the well casing.

1. A table of all representative wells including:
   1. The well name/number;
   2. TCEQ Water Source Code;
   3. Primary well(s) to be used for representative sampling;
   4. Alternate well(s) to be used for representative sampling if the primary well was not used at time a distribution positive sample was taken.
2. If the PWS has requested an exception to the TCEQ §290 Rules and Regulations for Public Water Systems for a water well regarding well construction, well records, or well setback distances to potential sources of contamination as listed in §290.41, the PWS should provide a written narrative discussing the merits of using this well as a representative well. The TCEQ will determine on a case-by-case basis if a well could be used for triggered source monitoring plans in this situation.
3. Written narrative summarizing the PWS decisions to select specific representative well(s) for triggered source monitoring.

Note: A report listing each PWS well, TCEQ Water Source Code, well information and unique ids for each well on file at the TCEQ Public Drinking Water Section is available for use in completing the TSMP report.

References:

Ground Water Rule Triggered and Representative Source Water Monitoring Guidance Manual, April 2009, EPA 815-R-09-003, <http://www.epa.gov/safewater>

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