

## Well Survey Procedures at Bureau of Land Permitted Facilities

In order to determine the impacts and potential impacts to potable water supply wells from soil, soil gas, or groundwater contamination, 35 IAC 1600, Subpart B establishes the minimum standards and requirements for performing water well surveys to ensure these wells are accurately identified and located. All Solid Waste permitted facilities, RCRA permitted facilities, and facilities pursuing RCRA closure, where exceedances of the applicable 35 IAC Part 620 groundwater quality standards (or in the case of RCRA closure, 35 IAC Part 742, Tier 1 groundwater remediation objectives), have the potential to impact potable water supply wells, must determine the existence and location of potable water supply wells as described in 35 IAC Part 1600 and this procedure. This procedure applies to projects that require the location of potable water wells to be identified as part of site investigation, corrective action activities, or Right to Know evaluation.

In order to meet these requirements, the facility in question must submit maps that identify the following:

1. All private, semi-private and non-community water system wells located at the property where the release occurred or within 200 feet of the property boundary where the release occurred;
2. All community water system wells located at the property where the release occurred or within 2,500 feet of the property boundary where the release occurred; and
3. All wellhead protection areas in which all or any portion of the property where the release occurred is located within that zone or area.

The facility must submit verification that all of the below sources have been investigated and the water well survey data (electronic, paper or physical) from these sources have been included on the map. This information shall be obtained from the following sources:

- Illinois State Geological Survey
- Illinois State Water Survey
- Illinois EPA Division of Public Water Supplies
- Illinois Department of Public Health
- County and Municipal Health Departments
- Local water supply entity (i.e., public water districts, public water supply companies), if data is not included in the previous listed sources.

If it is determined that groundwater contamination exceedances of the applicable 35 IAC Part 620, groundwater quality standards (or in the case of RCRA closure the 35 IAC Part 742, Tier 1,

groundwater remediation objectives), are measured or modeled to migrate off-site, the area of the water well survey must be expanded based on the measured and/or modeled groundwater plume.

NOTE: If contamination at a remediation site cannot be modeled due to geological constraints (i.e. bedrock), the information requested above shall be collected inside a survey area to be determined by the Illinois EPA on a site-by-site basis.

Documentation of the results of the water well survey or the expanded water well survey, must include the following information:

- Map(s) to appropriate scale showing the location of community water supply wells, potable water supply wells, and all applicable wellhead protection areas of the wells identified in the survey. The location of the measured and modeled contamination plume shall also be shown on the map(s) if the measured or modeled plume extends off-site.
- Tables of potable water supply wells and their respective wellhead protection areas.
- Narrative to supplement the map(s) and table(s) identified above. This includes the person(s) contacted as part of the survey, that person's title, sources of information used, field observations, etc.
- Certification by a Licensed Professional Engineer or Licensed Professional Geologist that the entities listed above have been contacted as part of the well survey and the information obtained is included in the map(s), table(s) and narrative.

When data sources as identified above do not appear to have adequately identified the location of potable wells or site-specific conditions warrant, additional investigation may be required. Such conditions include, but are not limited to:

- The local water supply entity does not bill a residence/business located within the search area, and the other record searches do not show a potable well on the property; or
- The water well survey does not appear to identify an accurate number of potable wells for the area when the locational information is compared to aerial photography or local zoning maps which identify residential and commercial structures.

The additional investigation must include, at a minimum, notification in the form of written communication to properties within the water well survey area and may include a physical well survey (e.g. face-to-face interviews with property owners, a reconnaissance survey looking for wellheads, etc.)