

New Jersey Department of Environmental Protection Division of Water Supply and Geoscience Bureau of Water Allocation and Well Permitting

Guidance for Preventing and Addressing Damaged, Lost and Destroyed Wells

Property owners are responsible for the maintenance of all wells located on their property and the decommissioning of a well when it will no longer serve a permitted use (N.J.S.A. 58:4A-4.1 et seq.). A state well permit grants permission to the property owner to install a well for its intended use and to the well driller to construct the well in a manner which meets all conditions listed on the permit and is completed in accordance with the well construction regulations at N.J.A.C. 7:9D.

Current regulations require the licensed well driller to obtain Global Positioning System (GPS) or licensed land surveyor data to report the location of the well, thereby reducing the chance of a well becoming lost. However, older methods used to report well locations were less accurate and the problem is compounded when the well head is buried beneath the ground surface. Thus, wells were often destroyed or simply unable to be located as a site was altered or redeveloped over time. The inability to locate or access a well tends to be the primary reasons wells cannot be properly decommissioned in accordance with the law.

Responsibility to Protect Wells

Proactive tracking and protection of wells, especially during periods of active construction or demolition, are the best and most effective ways to prevent wells from becoming lost or damaged. This is especially important for Licensed Site Remediation Professionals (LSRPs) actively working on sites involving wells as they share responsibility for properly decommissioning of all wells pursuant to N.J.A.C.7:26E-1.5(g). For additional information read <u>Wells and Remediation: LSRP Requirements and Recommendations</u>.

The Department recommends that the following actions be taken to avoid damage or loss of a well, particularly if there will be ongoing construction, demolition, excavation, and/or vehicle traffic near the well(s) or if wells are infrequently monitored.

- Wells should be clearly marked or protected by using one of the following methods:
 - Neon paint;
 - Concrete barriers, bollards, boulders, etc.;
 - Fence or rope to isolate the well from surrounding areas;
 - A steel plate cover over the well (for flush mount installations).
- Maintain an accurate inventory of all the wells (production and environmental) at the site and include:
 - Well Permit Number
 - The well permit number must be permanently affixed to the well per N.J.A.C. 7:9D-2.2(a)21.
 - Provided on <u>Monitoring Well Certification Forms A & B</u> where required for remedial projects.
 - Local ID/Site Specific ID
 - GPS well locational information (Northing and Easting)
 - Consider installing permanent locator tags in or on each well.
 - Conduct an inspection of the wells, at least annually, and take photographs to document the condition of wells and identify if they are being used for their intended purpose. Include at least one photo depicting well with observable landmarks to assist with field identification.

- Establish plans to safeguard the wells and review these plans with property owners, staff and site operators.
 - Documentation and regular review of operation and maintenance activities which could impact the wells
 - Safeguards implemented during activities near wells (operations, construction, repaving, etc.)
- For wells located on other properties, establish access agreements to use those wells and specify responsibility to properly decommission those wells.

How to Address a Damaged Well

When a damaged well is discovered, a New Jersey licensed well driller of the appropriate classification should be contacted immediately to evaluate the well. Unlicensed individuals are not permitted to attempt any corrective measures to repair a well. This includes, but is not limited to, straightening a bent or leaning well casing. Licensed well drillers and well drilling companies can be searched on <u>DEP DataMiner</u> by scrolling down to the "Well Drillers and Pump Installers" or "Well Drilling Companies" searches under the WS WELL PERMITS section.

How to Request a Determination of a Lost or Destroyed Well

Property owners, well drillers, and environmental consultants often contact the Department's well permitting program staff to report that a particular well cannot be located or has been destroyed in a way that will not allow for proper decommissioning in accordance with the well rules. A decommissioned well is defined as one that has been completed in accordance with the well rules (see N.J.A.C. 7:9D-3); meaning that a New Jersey licensed well driller has submitted a decommissioning report documenting the proper closure of the well.

To begin the process, a requestor, typically the property owner or their agent (e.g. well driller or environmental consultant, etc.), submits the necessary information to the Department as required by N.J.A.C.7:9D-3.5. Once the information is reviewed, the requestor will receive either a letter stating that the well is now considered to be lost or destroyed or that further information and documentation is needed prior to the Department determining the fate of the well. For wells determined to be lost, the letter informs the property owner of the obligation to decommission the well if it is discovered or becomes accessible in the future. If additional information is needed, the requestor will receive a letter specifying what is needed. Admission of a property owner, that they have lost or destroyed a well is a violation of the law and rule and may be subject to penalties.

While N.J.A.C.7:9D-3.5 specifies the application process for submissions to the Department for destroyed and lost wells, it does not establish a procedure on how to account for lost or destroyed wells where proper decommissioning was not possible. Such wells continue to appear as 'active' in NJDEP databases. For initiating the investigation and reporting of destroyed and lost wells, see page three of this document titled *Submittal Requirements for Lost or Destroyed Well Determination Requests*. This document gives the requestor a general understanding of what types of information and level of effort is needed prior to determining whether the well is lost or destroyed.

Submittal Requirements for Lost or Destroyed Well Determination Requests

In the event that a well has been destroyed or lost such that it cannot be decommissioned in accordance with Well Construction & Maintenance; Sealing of Abandoned Wells, N.J.A.C. 7:9D Subchapter 3, the property owner or its agent shall contact the Department in writing and provide the following information:

- All contact information for the responsible party/property owner of the well, including names, addresses, telephone numbers and email addresses;
- The facility and location information where the well was located, including county, township, lot, block, and the known or approximate coordinates;
- Program Interest ID (PI ID) issued by any Department Program for the property, if applicable;
- Date when it was discovered that the well was destroyed or lost;
- The approximate date the well was destroyed or lost;
- Circumstances resulting in the well being destroyed or lost;
- Detailed description of all action(s) taken to locate the well in the case of lost wells, or action(s) taken to facilitate decommissioning in the case of destroyed wells;
- Well permit number and well construction specifications, if known. If the well permit number or a copy of the well record is not available, the results of a completed well search which was submitted in accordance with the <u>Individual Well Search Procedure</u> on an <u>Individual Well</u> <u>Search Questionnaire</u> shall be enclosed.

Examples of action(s) taken to locate lost wells include, but are not limited to: interviewing the original well driller (if possible), interviewing site employees, metal detection, magnetometer, ground penetrating radar (GPR), obtaining original survey information, <u>Open Public Records Act (OPRA) request</u> of LSRP Monitoring Well Certification Forms A and B, and site excavation.

The written correspondence should include photographs, drawings, diagrams, maps, survey data, LSRP reports that contain site details and well use, original correspondence with the Department or any other State, County, or Local agencies, and/or well driller notes in order to document the actions that were taken. The Department expects the following information, at a minimum, to be completed to establish that a well is lost or destroyed:

- Well permit and record review;
- Site plan and tax map record/photo review;
- Historical and recent photo review;
- Interviews with existing and prior site employees and owners;
- Sanborn map and historical aerial photos;
- Site walk over/soil probing/magnetometer;
- Ground Penetrating Radar (GPR)/metal detector/other non-invasive investigations; and
- Physical Excavation to a minimum 3' depth in a 6' diameter at the best suspected location.

Failure to comply with the decommissioning requirements of N.J.S.A. 58:4A-4.1 <u>et seq</u>. and N.J.A.C. 7:9D-3.1 is considered a violation of the regulations and subject to enforcement action.

Any comments, questions or submissions can be emailed to <u>wellpermitting@dep.nj.gov</u>. Additional well information can be located on the Division's website at: <u>http://www.nj.gov/dep/watersupply/</u>