State of Wisconsin
Department of Natural Resources

Wisconsin Well and Pressure System Inspection

Form 3300-221 (R 11/11)

Notice: Information requested on this form is required by the Department for any private water system treatment application filed pursuant to chapters 280 and 281, Wis Stats. Personally identifiable information collected is not intended to be used for any other purpose but may be made available to requesters under Wisconsin's Open Records laws. The department recommends the use of this form for inspections of well and pressure systems and also requires that inspections be performed by licensed well drillers or pump installers when done for compensation in contemplation of a transfer of real property. Use of this form does not imply DNR approval for the well and pressure system. After the pressure tank, DSPS (Department of Safety and Professional Services) plumbing rules apply. Inspection fees may vary.

1. General

Inspection Requested By | Telephone Number

Mailing Address

City, State, ZIP Code

Owner's Name | Telephone Number

Mailing Address

City, State, ZIP Code

2. Location Information

County of Water System Location

Grid or Street Address or Road Name and Number (if available)

Subdivision Name | Lot # | Block #

Gov't Lot # | ¼ / ¼ | ¼ | Section | Township N | Range E / W

Lat. DEG MIN __ __ __ __ . __ __ __

Long. DEG MIN __ __ __ __ . __ __ __

3. Source Information

Source ☐ Drilled ☐ Driven Point ☐ Dug ☐ Spring ☐ Jetted ☐ Other _____

Well serves _____ # of homes and/or _____ (Ex. barn, restaurant, church, school, industry, etc.)

Wisconsin Unique Well No. ___ ___ ___ ___ ___ ___

High Capacity Well? ☐ Yes ☐ No

High Capacity Property? ☐ Yes ☐ No

4. Well Data

From ☐ Well Construction Report ☐ Owner's Memory ☐ Pump Installer ☐ Measurement

Constructed by

Approximate year well constructed

Well Location: ☐ Outside ☐ In Basement ☐ In Pit/Alcove ☐ In Crawl Space ☐ In Building ☐ In Pumphouse

Casing Diameter _____ (inches)

Well Terminates _____ (inches) ☐ Above ☐ Below the ☐ Floor ☐ Outside Grade

Casing Material

Well Depth (ft.) (If known)

Well Yield

Casing Depth (ft) (If known)

Well Located In Floodplain? ☐ Yes ☐ No

Well Properly Separated From Contamination Sources On Well Property? ☐ Yes ☐ No

Well Properly Separated From Contamination Sources On Neighboring Property? ☐ Yes ☐ No ☐ Unknown

5. Pump Data

Location: ☐ In Well ☐ In Basement ☐ In Pit/Alcove ☐ In Crawl Space ☐ In Building ☐ In Pumphouse

Pump Name & Type | Age | Pipe Material in Well | Method of Discharge | Cross Connections?

Pump Installer's Name | Amp Draw | Pipe Material Before Pressure Tank | Water Quality Characteristics

Pumped At GPM _____ for _____ Hours | Horsepower | Cap Type | Vermin Proof? ☐ Yes ☐ No | Water Treatment Equipment

Pressure Tank Type & Size | Voltage | Wires enclosed ☐ Yes ☐ No | Bacti Sample Taken ☐ Yes ☐ No | Where Sampled?

6. Conclusions & Recommendations

Water system working correctly? ☐ Yes ☐ No

Visible portions comply with ch. NR 812 in effect at time of installation? ☐ Yes ☐ No

Well filling and sealing needed? ☐ Yes ☐ No

Variance exists? ☐ Yes (Describe) ☐ No ☐ Not Needed

The information on this form lists facts and conditions of the visible portions of the well and pressure system at the time of inspection and does not imply or give any kind of guarantee. It is a statement of the opinion of the inspector regarding the compliance and operation of the system at the time of inspection.

Comments or Repairs Needed:

Inspector's Name | Telephone Number | DNR License Number | Date Signed

If a well and pressure system complies with the code in effect at the time it was installed, generally no upgrading is necessary. However, because the current code reflects the latest knowledge concerning drinking water safety, the inspector is encouraged to note items which do not meet the current code, and the owner is encouraged to upgrade their system to the current code requirements.

If a well and pressure system **does not** comply with the code in effect at the time it was installed, it must be upgraded to the standards for **new** installations.

This sheet summarizes major code requirements and when they became effective. For more information, the inspector should refer to the Existing Installation section of the October 1, 1994 code edition or the code in effect at the time of installation.

Commonly Encountered Well & Pump Code (ch. NR 812) Violations

Unprotected Buried Suction Line
Noncomplying Pit or Alcove (Sub-surface pumproom)
Basement Well Location
Stovepipe Casing
Unsanitary Dug Well
Poor Casing Condition
Shallow Casing Depth
Well Subject to Flooding
Unabandoned or Improperly Abandoned Well
Water Tests Bacti Unsafe
Well Too Close to Contaminant Source
Well Located in Floodway/Floodplain
Well Directly Downslope From Contam. Source
Casing Height Too Low
Noncomplying Seal or Cap
Yard Hydrant (Improperly Installed)
Substandard Pump & Supply Piping
Noncomplying Pitless Adapter or Unit
Noncomplying Check Valve Location
Noncomplying Sampling Faucet or Location
Nonpressure Conduit

Prior to 1991, nonpressure conduits were only allowed for wells serving 3 or fewer private residences. After February 1, 1991, they were not allowed for any new installation.

Pits and Subsurface Pumprooms

The construction of a new pit, be it for a pump, pressure tank or a well, was banned by the 1953 well construction/pump installation code unless it had written approval **and** met stringent standards. Pits are subject to flooding and are a sanitary hazard to a well and water system. See NR 812.36 for new pit approval requirements.

Pits constructed prior to April 10, 1953, must meet NR 812.42(2), summarized below:

1. Reinforced water-tight poured concrete construction. If pit is continuously dry and free of cracks, walls may be concrete block.
2. Poured concrete floor and the junction between walls and floor is watertight.
3. The roof or deck is at or above ground surface.
4. Access is provided through a manhole opening with a 4-inch raised curbing or a cast iron manhole frame and cover with gasket.
5. Casing height is at least 6 inches above floor.
6. Water does not enter through the floor, walls or roof.
7. The water is continuously bacteriologically safe.

It is not permissible to upgrade a cracked pit, a pit with roof below grade, a pit with evidence of water or a pit with an earthen floor.

Note: Subsurface pumproom pits (alcoves) have some different requirements.

To abandon a pit, extend casing 12 inches above grade, perforate or remove one wall and perforate floor if it's concrete, and fill pit with clean native compacted soil. Subsurface pump rooms attached to a basement need not be filled under most circumstances.

A Partial List of Contamination Sources Requiring Separation Distance From a Well

Distance (ft)	Source	Date
2	Building Overhang	1936
8	Building Drain/Cast Iron or Plastic	1936
8	Building Sewer/Cast Iron or Plastic	1936
8	Clearwater Sump/Watertight	1991
8	Contaminant Source Not In Code	1991
8	Downspout/Yard Hydrant	1951
8	Foundation Drain to Clearwater	1951
8	Foundation Drain to Sewer	1951
8	Noncomplying Pit	1975
25	Wastewater Sump/Cast Iron	1991*
25	Barn Gutter	1975
25	Building Drain/Other Material	1975
25	Building Sewer/Other Material	1936
25	Building Sewer/Pressure	1975*
25	Buried Home Heating Oil Tank	1975
25	Manure Pipe/Gravity/Cast Iron or Plastic	1991*
25	Manure Pipe/Pressure/Cast Iron or Plastic	1981*
25	Paved Animal Barn Pen	1975
25	Septic or Holding Tank	1951
25	Shoreline/Swimming Pool	1975
50	Animal Yard or Shelter	1975
50	Collector Storm or Sanitary Sewer	1975
50	Manure Pipe/Pressure/Other Material	1975*
50	Privy	1951
50	Sewage Absorption Unit	1951
50	Silo With Pit	1975
50	Silo Without Pit	1991*
100	Buried Petroleum Tank	1975
250	Manure stack	1991*
1200	Landfill	1975

*Earlier distances were less stringent. Check the well code.

There are additional contamination sources with separation distances in the well code. See ch. NR 812.

Well Filling and Sealing

Wells that are unsafe, unused or noncomplying must be properly abandoned according to ch. NR 812. DNR requires, with limited exceptions, that you hire a licensed well driller or pump installer to do this work. For more information on well filling and sealing, call a licensed well driller or pump installer; or if necessary, check the Department of Natural Resources website.

Water Treatment

For information on water treatment contact the Department of Safety and Professional Services.

Basement Wells

Basement wells were banned by the well code in 1953. They are subject to flooding, a sanitary hazard and a threat to groundwater. Basement wells are not needed because pitless adapters/units provide for an underground water line connection below frost level from the well to the basement.

Wells are allowed in **walkout** basements if you can walk outside **without** walking upstairs or uphill.

A basement well is **noncomplying** if:

- It was installed in the basement before April 10, 1953 **and**:
  1. It was installed too close to a contamination source or a contamination source was later installed too close to the well; or
  2. The well has less than 25 feet of pipe for a driven point well, less than 10 feet of pipe into bedrock for a sandstone well, or is not cased through unbroken bedrock for a limestone well;
  3. The condition of the basement or well is unsanitary; or
  4. The well produces bacteriologically unsafe water after three reasonable attempts at chlorination;
  5. The well poses a threat to groundwater or to any home's water supply.
- It was installed in the basement **on or after** April 10, 1953 and formerly used as a potable well. The owner is responsible to prove the well's age.
- It was installed in a basement **before** February 1, 1991 for nonpotable use and is a threat to groundwater quality.
- It was installed in the basement **on or after** February 1, 1991, for any purpose.
- It was installed in a walkout basement in poor condition or the well produces unsafe water.

Screens may not be replaced on driven point wells. When a screen needs replacement, the driven point well must be permanently abandoned.

For more basement well information contact the Department of Natural Resources.

Variances

A variance is a special DNR approval that allows an owner to continue use of a water system when strict compliance with the code is **not feasible**. Comparable sanitary protection must be provided.

There must be good justification for issuing a variance (e.g., there is no other feasible location for the well on the property). Variance requests must be signed by the owner of the property.

Water Testing

For information on water testing, request the DNR brochure: "Tests for Drinking Water from Private Wells."

This form was developed as a cooperative effort between
the Wisconsin Water Well Association and the Wisconsin Department of Natural Resources