

**Notice:** This form is authorized by ch. 280, Wis. Stats, and ch. NR 812, Wis. Adm. Code. The Department of Natural Resources (DNR) requires the use of this form whenever there is an inspection or any statement regarding the existence or nonexistence of wells that need to be filled and sealed; or the compliance, condition, capacity and/or performance of the well and pressure system by any individual, for compensation, at time of property transfer, except for a report of water quality test results **by a certified laboratory**. An inspection is not required, but if one is conducted, it must be done by an **individually-licensed well driller or pump installer (not their unlicensed employee)**. Conducting an inspection without a license; failure to use this form; and/or failure to conduct a complete inspection, is punishable by law. Use of this form does not imply DNR approval of the well and pressure system.

The form is intended to inform the buyer and seller of visible and/or known well and pressure system violations regulated by DNR that exist upstream of the pressure tank, which is usually located in the basement. The inspection includes **all wells** on your property, not just the well currently serving your home. Your well and pressure system is being evaluated based on standards in effect at the time of installation; or if there were no standards in effect, then according to the standards in s. NR 812.42 Wis. Adm. Code. Licensed plumbers are not qualified to inspect the water system upstream of the pressure tank.

Page 2 lists all potential violations and items of concern that the well driller or pump installer must evaluate during an inspection. Any box in section 3 "checked" by the inspector indicates a violation of the state well and pump code. That means, **if** DNR staff viewed the violation(s), we would require correction at the well owner's expense. Next to each violation there is a number corresponding to information on pages 6-10 of the form. Any corrections must bring the feature into compliance with **current** NR 812 standards. It is possible some violations can only be corrected by drilling a new well.

Some well and pressure system violations will not be discovered because they are beyond the scope of the minimum inspection required by ch. NR 812 and that is provided with this form. Most features of the well, and many contamination sources, are buried and cannot be observed without opening the well or excavating the ground. During a minimum inspection there is no requirement for: removal of the well cap or seal; measurement of casing depth; verification that grout is present in the space around the casing; excavation to find the edge of the septic system or other potential contaminant sources; or a search using a magnetic locator to find an old well. To evaluate these features requires additional investigation and thus, additional cost. Other features simply cannot be practically determined after the well has been finished.

Some inspectors may include an evaluation of the condition/capacity/performance of the well and pressure system in their inspection, although this is not required by law. No one can predict when a pump or pressure tank will fail or when groundwater levels will drop, requiring a new well; deepening of the existing well; or lowering of the pump setting.

The well and pressure system on this property may or may not produce enough water to meet your expected water needs. Additional residents; the installation of plumbing fixtures that use lots of water; or sprinkling systems may affect the performance of the well and life of the pressure system. Not all wells are created equal. Generally speaking, four-inch diameter drilled wells can produce more water than driven point wells; and wells in granite areas tend to produce less water.

Inspections must include a diligent search for unused or noncomplying wells that must be properly filled and sealed. Unused or noncomplying wells that are not filled and sealed with approved materials are serious violations because they are a pathway for contaminants to enter the ground and ruin your drinking water well, neighboring wells, or the aquifer. Unless those wells are found, and properly filled and sealed, the entire well and pressure system on the property violates code.

When there is an inspection, the **inspector** must collect the water samples to be tested for bacteria and nitrate by a Wisconsin-certified laboratory. DNR strongly recommends having the water tested for arsenic by a certified laboratory because it has been found in wells in almost every county. For other water tests to consider, consult the brochure: Tests for Drinking Water from Private Wells available at: [www.dnr.wi.gov/org/water/dwg/pubs/TestsForWell.pdf](http://www.dnr.wi.gov/org/water/dwg/pubs/TestsForWell.pdf).

Violations found at time of property transfer are a matter to be resolved between the buyer and seller. **Do not** send this form or water quality test results to DNR except when requesting a variance. Code variances are rarely granted and are only granted when: code compliance is not physically possible; there is justification; **and** additional protection is provided to the water supply. Take care of problems now so you have a legal, sanitary and safe water system. You can rely on a well driller or pump installer to advise you on how to correct violations. More information is available on the DNR website. Hire a registered firm or licensed individual for well drilling or pump work. Measuring casing, or filling and sealing a well (drilled or driven point) may only be done by licensed well drillers or pump installers or their employees. License holders can be found on the DNR website or in the business pages of your phone book. Test your water for bacteria annually.

Contact Information

Inspection Requested By Telephone Number
Mailing Address City State ZIP Code
Owner's Name Telephone Number
Mailing Address City State ZIP Code

Property Location

County of Water System Location Grid or Street Address or Road Name and Number (if available) Subdivision Name
Lot # Block # Gov't Lot # 1/4 1/4 Section Township Range E/W Well Location: Latitude\* Longitude\* Method
deg decimal minutes deg decimal minutes

Visible or Known Violations

Visible violations of any well and/or pressure system on this property that are a threat to health and/or groundwater are noted below by a check mark in the box next to it. Numbers in parenthesis refer to explanations on pages 5-8. Variances are rarely issued for most of the items on this list.

- Unused or Noncomplying Well Must be Filled and Sealed (1)
Second Level Search Needed for Possible Unused Well (2)
Noncomplying/Illegal Stovepipe or Thin-Walled Casing (3)
Unsanitary/Noncomplying Dug Well (4)
Noncomplying Unprotected Buried Suction Line (5)
Noncomplying/Illegal Pit or Alcove (Subsurface Pumproom) (6)
Noncomplying/Illegal Basement Well Location (7)
Poor Casing Condition (Badly Corroded or Cracked) (8)
Noncomplying/Illegal Well Location Too Close to Contamination Source (9)
Noncomplying/Illegal Well in Floodway or Floodplain (10)
Well Subject to Localized Flooding (11)
Illegal Cross-Connection (12)
Noncomplying/Illegal Driven Point Well (after 2-1-1991) (13)
Noncomplying/Illegal Nonpressure Conduit (14)
Noncomplying/Illegal Hand Pump (15)
Illegal Pump Height or Piping Height for Offset Pump (16)
Noncomplying/Illegal Yard Hydrant Upstream of Pressure Tank (17)
Nonplumbing/Illegal Materials for Pump and Supply Piping (18)
Noncomplying/Illegal Flowing Well Installation (19)
Noncomplying/Illegal Check Valve Location (20)
Noncomplying/Illegal or Broken Well Seal or Cap (21)
Noncomplying/Illegal Casing Height (22)
Electrical Wires Not Properly Protected by Conduit (23)
Sample Faucet Missing or Noncomplying (after 2-1-1991) (24)
Extreme Health/Safety Hazard that may or may not pre-date Code (25)

I certify that I personally inspected the well and pressure system on this property for all the visible and known noncomplying/illegal features listed above and have noted all violations by checking the appropriate boxes.

Signature of Licensed Well Driller or Pump Installer Individual License # Date Phone Number

Well and pressure system complies with ch. NR 812 in effect at time of installation, or if installed before April 1, 1953, to s. NR 812.42, Wis Adm. Code.

Water test results for bacteria and nitrate:
Are attached To be sent later

Notes:

Other Items of Possible Concern

- Driven Point Pipe Depth (26)
Well Construction Report Not on File or Unlocatable in Shallow Rock or Special Well Casting Depth Area (27)
Pre-1979 Two-Wire Pump (28)
Evidence of Some Corrosion on Well Casing Pipe (29)
Other
Inaccessible or Difficult Location for Future Well Work (30)
Inaccessible or Difficult Location for Future Pump Work (31)
Pump Installer or Well Driller Must Replace Well Cap with Vermin-Proof Cap Next Time There is Any Work on Well or Pump, though you are advised to replace it now (32)

The information on this form lists facts and conditions of the visible and/or known 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 of the system at the time of inspection.

\* Required for variance requests to keep and upgrade installation.

**Instructions:** Complete this sheet for each well on the property whether in use or not and whether potable or nonpotable.

### Source Information

Source:  Drilled  Driven Point/Jetted  Dug  Spring\*  Surface\* \* requires DNR evaluation Wisconsin Unique Well No. \_\_\_\_\_

Well serves \_\_\_\_\_ # of homes and/or \_\_\_\_\_ (tavern, barn, restaurant, church, school, industry, etc.)

Well not in use

High Capacity Well?  Yes  No      High Capacity Property?  Yes  No

### Well Data

Casing Depth (if known) \_\_\_\_\_ ft      Data from:  Well Construction Report  Pump Installer  Owner's Memory  Measurement – Required for variance request      Approximate Year Well Constructed \_\_\_\_\_

Well Location: \_\_\_\_\_ (a) complete page 4A      (b) complete page 4B

Outside  Under deck  Walkout basement  In building w/o space under floor  Through basement or crawl space (b)

Pumphouse  Pit (a)  In basement (b)  Alcove or subsurface pumphouse (a)  Crawl space or under floor w/o basement (b)

Casing Diameter \_\_\_\_\_ inches      Well Terminates  Above the  Floor  Below  Outside Grade      Casing Material \_\_\_\_\_

Cap Type:  Overlapping Cap  Vermin-Proof Cap  One-Piece Well Seal  Two-Piece Well Seal  Other \_\_\_\_\_

Wires Enclosed?  Yes  No      Well Located In Floodplain?  Yes  No      Height Above Floodplain \_\_\_\_\_      Well properly separated from contamination sources on adjacent property?  Yes  No  Unknown

### Separation Distance from Well as Required under s. NR 812.08, Wis. Adm. Code – check 1st box if present on property; enter distance to well in 2nd box

<input type="checkbox"/>	Septic or Holding Tank, 25 ft., 1951	<input type="checkbox"/>	Wastewater Sump/Watertight, 25 ft., 1991
<input type="checkbox"/>	Sewage Absorption Field or Mound, 50 ft., 1951	<input type="checkbox"/>	Noncomplying Pit, 8 ft., 1975
<input type="checkbox"/>	Grease Trap, 25 ft., 1951	<input type="checkbox"/>	Barn Gutter or Animal Barn Pen, 25 ft., 1975
<input type="checkbox"/>	Collector Sewer > 6", 50 ft., 1975, 1994 (Number of units served _____)	<input type="checkbox"/>	Manure Pipe, 25 ft., 1981
<input type="checkbox"/>	Gravity Building Sewer, 8 ft., 1936	<input type="checkbox"/>	Animal Yard or Shelter, 50 ft., 1975
<input type="checkbox"/>	Pressure Bldg Sewer, 25 ft., 1975	<input type="checkbox"/>	Perm. Manure Stack, 250 ft., 1991
<input type="checkbox"/>	Pressure Bldg Sewer (non commerce materials), 50 ft., 1994	<input type="checkbox"/>	Temp. Manure Stack, 150 ft., 1994
<input type="checkbox"/>	Buried Sewerage Drain (commerce materials), 8 ft., 1975	<input type="checkbox"/>	Silo, 50 ft., 1975, 1991
<input type="checkbox"/>	Buried Sewerage Drain (non commerce materials), 25 ft., 1975	<input type="checkbox"/>	Kennel with < 4 pets, 8 ft., 1991
<input type="checkbox"/>	Yard Hydrant, 8 ft., 2008 (never allowed in well)	<input type="checkbox"/>	Kennel with > 3 pets, 50 ft., 1991
<input type="checkbox"/>	Buried Petroleum Tank, 100 ft., 1975	<input type="checkbox"/>	Other Manure Structure (see code)
<input type="checkbox"/>	Buried Home Heating Oil Tank, 25 ft., 1975	<input type="checkbox"/>	Salt, Deicing Storage, 250 ft., 1991
<input type="checkbox"/>	Surface Fuel Oil Tank > 1,500 gal, 100 ft., 1991	<input type="checkbox"/>	Silage or Silo (see code)
<input type="checkbox"/>	Lake, Stream or River, 25 ft., 1975	<input type="checkbox"/>	Inground Swimming Pool, 8 ft., 1975
<input type="checkbox"/>	Ditch, 25 ft., 1991	<input type="checkbox"/>	

Does owner have a variance for separation distance?  Yes  No  Not Needed      Are downspouts and surface water flow directed away from well?  Yes  No

### Pump / Supply Line Data

<b>Pump Location:</b> <input type="checkbox"/> None – Unused well must be filled and sealed <input type="checkbox"/> In Well <input type="checkbox"/> On Well <input type="checkbox"/> Building <input type="checkbox"/> Pumphouse <input type="checkbox"/> Basement <input type="checkbox"/> Pit <input type="checkbox"/> Alcove <input type="checkbox"/> Crawl Space	<b>Pump Type:</b> <input type="checkbox"/> Submersible <input type="checkbox"/> Shallow Well <input type="checkbox"/> Double Pipe Deep Well <input type="checkbox"/> Single Pipe Packer - Jet <input type="checkbox"/> Working Head Offset? <input type="checkbox"/> Y <input type="checkbox"/> N Other _____ Height above floor _____	<b>Well Discharge Piping:</b> Above Ground <input type="checkbox"/> Y <input type="checkbox"/> N Pitless Adapter <input type="checkbox"/> Y <input type="checkbox"/> N Concentric <input type="checkbox"/> Y <input type="checkbox"/> N Pressurized <input type="checkbox"/> Y <input type="checkbox"/> N Buried Unprotected Suction Line <input type="checkbox"/> Y <input type="checkbox"/> N Diam. _____ Height above floor _____ Cross connection between nonpotable water & well water? <input type="checkbox"/> Y <input type="checkbox"/> N Describe _____	<b>Samples Taken From:</b> <input type="checkbox"/> Sample Tap <input type="checkbox"/> Kitchen <input type="checkbox"/> Bath <input type="checkbox"/> Outside Tap <hr/> <b>Sample Faucet:</b> <input type="checkbox"/> None <input type="checkbox"/> At 'T' of Pressure Tank <input type="checkbox"/> < 12" Above Floor <input type="checkbox"/> Threaded End (replace or file threads)
<b>Pipe Material Before Pressure Tank</b> _____	<b>Installation Date</b> _____	<b>Pump operational?</b> <input type="checkbox"/> Y <input type="checkbox"/> N	<b>Illegal check valve ahead of pressure tank?</b> <input type="checkbox"/> Y <input type="checkbox"/> N

DRAFT

**Evaluation and/or Approval Application for a Well Located in a Pit or Alcove (subsurface pumphouse)**

Pending updated Word doc from Margie

DRAFT

**Evaluation and/or Variance Application for a Well:**

- **Located in a Basement;**
- **Extending Through a Basement (to or through a floor above);**
- **Terminating Under the Floor of a Building Without a Basement; or**
- **In a Below-Grade Crawl Space**

Pending updated Word doc from Margie

DRAFT

**Explanation of Violations and How to Correct Them**

1. Unused and/or Noncomplying Well Must be Filled and Sealed. There is a well on your property that is unused, not operational, and/or is illegal/noncomplying. It must be filled and sealed by a Wisconsin licensed well driller or pump installer or their employee. Wells no longer in use are often in disrepair and may allow contamination from the ground surface to enter the aquifer and ruin your drinking water well or your neighbor's well. If an aquifer or a neighbor's well becomes contaminated because of a well that has not been properly filled and sealed, the well owner could be held responsible. (s. NR 812.26)
2. Second Level Search Needed for Possible Unused Well. Based on the presence of piping in the basement, or the presence of outbuildings; and the lack of a well filling and sealing form in DNR records, there is a strong likelihood that an unused well exists on the property that is not properly filled and sealed. This requires an additional records search and/or a magnetic locator survey of the property to find the well so that it can be properly filled and sealed. In some cases the well driller or pump installer will be able to verify that the well was likely properly filled and sealed and provide the filling and sealing paperwork for the well. Either way, additional cost will be involved. (s. NR 812.42)
3. Noncomplying/Illegal Stovepipe or Thin-Walled Well Casing. Stovepipe casing is very thin-walled pipe that was used more than 50 years ago when there was a shortage of steel. Stovepipe casing corrodes through easily, providing the well water with little or no protection from bacterial or viral contamination. This problem requires that you drill a new well. (s. NR 812.17)
4. Unsanitary/Noncomplying Dug Well. Dug wells are the "horse and buggy" of well construction. The well is often held open by mortared field stone. There is usually no well casing pipe, so bacteria, insects and rodents can easily enter your water. These wells not only pose serious health hazards, but are safety concerns because children and animals can fall into them. Have the well filled and sealed by a registered well driller or pump installer and drill a new well. (s. NR 812.42(5))
5. Noncomplying Unprotected Buried Suction Line. This is the horizontal pipe that brings the water from your well into the home. It is the equivalent of a buried vacuum cleaner hose. If it develops a hole, bacteria and viruses can be sucked into your water. Upgrade your system with a submersible pump and a pressurized discharge line; or consult a licensed pump installer. (ss. NR 812.32 and NR 812.42(6))
6. Noncomplying/Illegal Pit or Alcove. Fifty years ago wells often terminated in concrete vaults called pits or in subsurface pumprooms adjoining basements called alcoves. Pits and alcoves are subject to flooding, which can allow water to pool around and overtop your well casing and contaminate the well and aquifer. Today there are better, more sanitary locations for wells and more sanitary ways to connect the pump to the water system. Page 4A helps the inspector evaluate whether your pit/alcove and well are complying and the likelihood of receiving a variance to keep the well with modifications. A variance application must include the complete inspection form; map or sketch of the property; photographs; and a well construction report or statement of the well casing depth by a well driller or pump installer. Measuring the well casing pipe depth will involve additional cost and is not included in an inspection. If well casing pipe does not extend deep enough; or if there are other violations, you must construct a new well and fill and seal the pit/alcove well. If the well casing depth complies, the licensed pump installer may install a pitless adapter, extend the well casing pipe above the ground surface and eliminate the pit by filling it. (ss. NR 812.36 and NR 812.42 (2) and (3))
7. Noncomplying/Illegal Basement Well. Wells in basements are a sanitary hazard and are also subject to flooding. Wells have not been allowed to be constructed in basements or have their screens replaced in basements since 1953 because they tend to have shallow, corroded casing pipe. Sewer backups cause flooding in basements, resulting in the well being overtopped with sewage, and contaminating the well and aquifer. Wells in basements, particularly driven points, tend to have less than the minimum required depth of casing pipe. Page 4B helps the inspector evaluate whether your basement and well are complying and the likelihood of receiving a variance to keep the well with modifications. A variance application must include the complete inspection form; map or sketch of the property; photographs; and a well construction report or a written statement of the well casing depth by well driller pump installer. Measuring the well casing pipe depth will involve additional cost and is not included in an inspection. If the well casing pipe does not extend deep enough; or there are other violations, you must construct a new well and fill and seal the basement well. (ss. NR 812.08 (2) and NR 812.42(9))
8. Poor Well Casing Pipe Condition (Badly corroded or cracked). The well casing pipe that is visible above ground appears to be corroded or cracked so the well water is not provided with adequate protection from bacterial or viral contamination below ground. To verify the well casing pipe condition, the well cap should be removed to look in the well and/or the well should be televised. These steps will involve additional cost and are not included in an inspection. Unless the well casing pipe is determined to be sound to an adequate depth (25 feet for a sand and gravel well, or sandstone well installed before February 1, 1991; 30 feet for a sandstone well installed on or after February 1, 1991; 40 feet for other bedrock formations; and 60 feet for limestone or dolomite wells installed on or after February 1, 1991), the only option is to properly fill and seal the well and replace it with a new well. (s. NR 812.17)

DRAFT

**Explanation of Violations and How to Correct Them (continued)**

9. Well Too Close to a Contamination Source. Wells must be far enough away from pollution sources so that, if there is a spill/leak/failure of the source, the well does not become contaminated; and so the well does not become a channel for contamination to migrate deeper into the aquifer. Well locations must comply with minimum separation distances in effect at the time of well construction and also those in effect when later contaminant sources were installed. In some instances DNR may issue a variance allowing you to keep the well if there is extra well casing pipe depth to compensate for the lack of separation distance, and there is justification to do so. The variance application must include the complete inspection form; map or sketch of the property; photographs; dates of well construction and contaminant source installation; and a well construction report or written statement of the well casing depth by a well driller or pump installer. Measuring the well casing pipe depth will involve additional cost and is not included in a minimum inspection. (s. NR 812.08)

10. Well in a Floodway or Floodplain. A floodplain is the area along rivers where flooding occurs. The floodway is that part of the floodplain where the floodwater is moving. The floodfringe is the part of the floodplain inundated by non-moving water. The seller has indicated knowledge that this property is in the floodway or floodplain or has flood insurance. If your well was installed on or after February 1, 1991 in a floodway, it is illegal and must be filled and sealed. If your well is in a floodfringe, the top of the well casing pipe must extend at least two feet above the regional flood elevation. If it is in a floodfringe and does not extend two feet above the regional flood elevation, have the well casing pipe extended, after a well driller or pump installer measures the well casing pipe depth or you have been provided with a well construction report showing the well casing pipe depth meets the minimum requirements. Measuring the well casing pipe depth will involve additional cost and is not included in an inspection. (s. NR 812.08(3)) (What if unable to contact seller.)

11. Well Subject to Localized Flooding. If your well is located on a low spot on your property, surface water can pond around it. This puts your well at risk from bacterial and viral contamination because water can drain into the ground immediately next to the well casing pipe or even overtop the well and enter through the well cap. In some cases you may be able to correct this problem by redirecting the water to flow away from the well; or by adding fill material, if it doesn't reduce the casing height to less than the 12 inches above grade. (s. NR 812.08(1))

12. Illegal Cross-Connection. This problem involves an interconnection between your well water system and waste piping on the property; or an interconnection between a municipal water supply and a private well. An example is a hose bib with a hose extending into a sink. Cross-connections can and have caused disease outbreaks, or contamination of a public water supply. These are usually resolved by changing the piping arrangement; installing a smooth end faucet; or by eliminating the hose connection on the sample or sink faucet. (s. NR 812.27(9))

13. Noncomplying/Illegal Driven Point Well Installed On or After February 1, 1991. There is no well construction report for your well filed with the state, as required by law. Lack of a well construction report is a strong indication the well was constructed by someone without an understanding of the well code. This also calls into question the well construction features and materials. You may be allowed to keep this well, but only after a well driller or pump installer measures how many feet of pipe are in the well and verifies the materials used; and the person who installed the well files a well construction report with DNR. Measuring the well casing pipe depth will involve additional cost and is not included in a minimum inspection. The minimum well casing pipe depth without the screen must be at least 25 feet. (s. NR 812.23)

14. Noncomplying/Illegal Nonpressure Conduit. Starting February 1, 1991 non-pressurized pipe was no longer allowed to enclose the suction or discharge piping between a well and an offset pump. Nonpressure conduits have never been allowed on any system serving more than three homes or a public water supply (restaurant, tavern, etc.) There are many possible compliance problems with nonpressurized conduits: They can be connected improperly to the well casing pipe; they can lack a seal on the basement end; or they can enter the basement too close to the floor making them subject to flooding if the basement floods. Noncomplying non-pressure conduits are a sanitary hazard and increase the likelihood of bacteria and viruses entering your drinking water. Most nonpressure conduit violations require their elimination and replacement with pressurized piping. Discuss the best way to solve your problem with a pump installer. (s. NR 812.42(6))

15. Noncomplying/Illegal Hand Pump. Hand pumps are often attractive resting places for birds so they are required to be designed and installed in such away that they don't allow contaminated water to enter the well and piping. Downturned spouts and sealed openings help to keep the water from contamination. (s. NR 812.32(7))

16. Illegal Pump Height or Piping Height for Offset Pump. A pump or piping in the basement which is too close to the floor can allow the well to become contaminated if flooding occurs. A pump installer can help you solve this problem. (ss. NR 812.32(2) and NR 812.42(6))

17. Noncomplying/Illegal Yard Hydrant on the Water Line Upstream of Pressure Tank. Yard hydrants can be a problem because the drain feature that protects some of them from freezing can allow shallow groundwater to be sucked into your water line. Also, if a hose is connected to the hydrant, it can allow water from a tank to be back-siphoned into your well. Yard hydrants were never allowed to be installed in wells. Yard hydrants installed for wells constructed after 2008 must

DRAFT

**Explanation of Violations and How to Correct Them (continued)**

have features that prevent both of these possibilities. These features are called backflow preventers and hose connection vacuum breakers. A pump installer can explain the problems with your yard hydrant and how to correct them. If you have a yard hydrant installed downstream of the pressure tank, it is not under DNR authority and is regulated by the State Plumbing Code. (s. NR 812.35)

18. Nonplumbing/Illegal Materials for Pump and Supply Piping. There is nonplumbing material installed downstream of a buried supply line from the well. This material was likely installed by a do-it-yourselfer and consists of black poly pipe; corrugated pipe; radiator, garden or braided hose; or drain waste and vent material. There are standards for the kinds of materials that can be used to supply water because nonplumbing materials will allow contaminants to leach into your drinking water supply. This problem requires replacement of the nonplumbing materials by a pump installer. (s. NR 812.28)

19. Noncomplying/Illegal Flowing Well Installation. There are specific requirements for pump installations for flowing wells in s. NR 812.32(9) that are designed to protect drinking water and the aquifer. A licensed pump installer can explain what changes must be made to the installation to bring it into code compliance. (s. NR 812.32(9))

20. Noncomplying/Illegal Check Valve Location. There is a check valve installed downstream of the buried portion of the supply line from the well. A check valve located beyond a buried portion of supply pipe can cause the system to act like an unprotected buried suction line and pull contaminants into the piping. Correction requires removal of the check valve by a pump installer. (s. NR 812.32(4))

21. Noncomplying/Illegal or Broken Well Seal or Cap. It is important for the top of the well casing to be protected from rodents, insects, debris and dogs. Wells located outside a building must have a properly-fitting, overlapping well cap or a one-piece well seal. If your well cap is broken, old or poorly-fitting, replace it with a vermin-proof cap. Properly installed it will keep out mice, earwigs, spiders and other varmints.

22. Noncomplying/Illegal Casing Height. The well casing pipe must extend far enough above the ground to prevent it from being overtopped in the case of unusual rainfall or flooding. Your well casing height seriously violates code because it is:

- Less than the 6-inch minimum height above grade for wells installed before April 10, 1953
- Less than the 8-inch minimum height above grade for wells installed on or after April 10, 1953 and before February 1, 1991 (Your well is actually less than 6 inches above grade.)
- Less than the 12-inch minimum height above grade for wells installed on after February 1, 1991 (Your well is actually less than 8 inches above grade.)

When a noncomplying casing height is corrected, it must be corrected to meet the current code (12 inches).

23. Electrical Wires Not Enclosed. Electrical wires run from the pump in the well to the electrical box in the house. Those wires must be enclosed in a conduit or pipe sleeve as they exit from the well cap and are directed underground before going to the house. If the sleeve is absent; doesn't fit tightly into the well cap; or doesn't extend into the ground, mice and insects can enter your well and introduce bacteria into your drinking water. A licensed pump installer can correct this problem. (NR 812.30(5))

24. Sample Faucet Lacking or Noncomplying. Sample faucets have been required upstream of the pressure tank or on the pressure tank "tee" since 1953. Sample faucets allow you to collect a water sample directly from your well so that you can find out if a bacteria problem is coming from the well or from other piping in the house. On or after February 1, 1991, a faucet also had to meet other standards for diameter, material, height above the floor and be plain end. A pump installer can correct a sample faucet problem. If the presence of threads is the only problem, you can use a metal file or saw to remove them. (ss. NR 812.34)

25. Extreme Health or Safety Hazard. There is a significant, life-threatening health or safety concern on your property, clearly visible to the inspector and not explicitly addressed by the well and pump code; or not listed on this form. Electrical concerns could be bare insulation, no wire nuts, no cover on pressure switch, lack of doors on the electrical box, UF wire run within a conduit, or Romex not run within a conduit, Safety and sanitary concerns could be storage of chemicals too close to the well, or an obviously failing septic system.

**Other Items of Note:**

26. Driven Point Pipe Depth. Your driven point well was installed before February 1, 1991. Driven point wells are often installed by unlicensed persons, to an inadequate depth and with unapproved materials. To be code-complying, your well must have at least 25 of casing pipe, not including the well screen. The Department recommends that the casing depth be measured by a well driller or pump installer.

DRAFT

**Explanation of Violations and How to Correct Them (continued)**

27. Well Construction Report Not on File or Unlocatable. Well construction reports for drilled wells have been required to be filed with the DNR since 1936. Because your well is located in an area of shallow bedrock or in a special well casing depth area (more susceptible to surface water contamination) and a limited search found no well construction report on file with DNR, the Department recommends that your well casing pipe depth be measured by a well driller or pump installer. The well must have at least 25 feet of well casing pipe for if it is a sandstone well constructed before February 1, 1991; 30 feet for sandstone wells installed on or after February 1, 1991; 40 feet of well casing pipe if it extends into other bedrock formations; or 60 feet of well casing pipe if limestone or dolomite is encountered above the 10-foot depth and the well was constructed on or after February 1, 1991. Casing depth is important because it is what protects your drinking water supply from surface and near surface contamination. (s. NR 812. 22(7))

28. Pre-1979 Two-Wire Submersible Pump. Prior to 1979, some two-wire submersible pumps and pump capacitors contained PCB's. The pump in your well may be one of those. Further investigation is needed by a pump installer and will likely involve additional cost. (Go to ? on the web for more information.)

29. Evidence of Some Corrosion on Well Casing Pipe. Your well casing pipe shows evidence of corrosion or pitting. Though not currently serious, this concern should be evaluated regularly. If the corrosion is bad enough to significantly reduce the wall thickness of the casing pipe, corrective work is necessary.

30. Inaccessible Location for Future Well Work. (Not the same as a basement or pit well). Your well is located under a building or building extension; or in a building (and where the casing comes out of the earth it is not below the outside ground grade). At one time the department required variances for these wells; Or, for wells that had a building constructed over them, required an access hatch over the well. A variance is no longer required. You should keep in mind: however, that if your well needs to be deepened or lined in the future, it may be expensive or impossible to get a drilling rig over the well and you may find it necessary to drill a new well.

31. Inaccessible Location for Future Pump Work. Your well is located under a building or building extension; or in a building, making it difficult or impossible to pull the pump to repair it or to install a new one. At one time, the department required variances for these wells or required an access hatch. A variance is no longer required, but future pump repairs could be expensive.

32. The Pump Installer or Well Driller Must Replace the Well Cap with a Vermin-Proof Cap the Next Time There is Any Work on The Pump or Well. This is a notice that, if any work is done on this well and pressure system, now or in the future, the overlapping well cap must be replaced with a new vermin-proof cap. You are encouraged to do it now, to prevent future bacteria problems caused by insect or vermin infestations. If you have a fake stone or "wishing well" installed over your well, you should especially update the cap, because these can provide attractive housing for mice. (s. NR 812.??)