# **NON-TRANSIENT NON-COMMUNITY SANITARY SURVEYS**

# A Fact Sheet For Non-Transient Non-Community Water System Owners And Operators

Water system evaluations play a role in proactively ensuring drinking water is safe for human consumption throughout Wisconsin's approximately 11,500 public water systems. The Environmental Protection Agency (EPA) under the Safe Drinking Water Act requires all new or existing non-transient non-community (NN) water systems to have a sanitary survey at least once every five years. A sanitary survey may also be required anytime a new well is constructed, new treatment is installed, or when major updates are made to the water system. Here is an example of a NN Sanitary Survey Checklist.

The Wisconsin Department of Natural Resources (DNR) representatives inspect NN water systems. The sanitary survey reviews five physical elements of a water system. These include:

## 1. SOURCE

The most common source of drinking water for NN water systems is groundwater. Your DNR representative will look at the well casing, the surrounding sanitary conditions and location of the well relative to potential contamination sources.



Condition of well casing, well cap and conduit



Well height – current code is a 12-inch minimum for wells since 1991



Well vent screen and electrical conduit seal check

# 2. PUMPS, PUMP FACILITIES & CONTROLS

Information gathered on the well pump is reviewed, along with a visual review of the pump electrical wiring and well discharge type as part of the survey. It is helpful to share information on the pump size, depth setting, year of installation and model number if this information is available.









Well pump pressure switch box, pressure gauge and source sample faucet Well pump electrical control box, variable frequency drive

Above ground discharge and controls on discharge line

#### 3. STORAGE

The type of water storage, location and condition of the equipment are examined.







Pressure tanks



Non-pressure storage tanks (aka water storage facilities)

## 4. TREATMENT

A review is completed of treatment equipment installed on the water system and maintenance practices for the equipment.



Sediment filter



Water softener



Chlorination injection system and pre-treatment devices

#### **5. DISTRIBUTION SYSTEM**

Portions of the plumbing system that are accessible during the sanitary survey are reviewed for backflow protection and sanitary conditions.



Faucet with built-in vacuum breaker



Faucet with vacuum breaker added



Manufactured air gap for water treatment backwash



Dual check valve

In addition to the above mentioned physical elements of the water system, a sanitary survey further evaluates the following items.

## **6. SYSTEM MANAGEMENT COMPLIANCE**

The operational capabilities and compliance history of the water system and the ability of the water system representative to respond and resolve system issues is assessed.

#### 7. MONITORING. REPORTING AND DATA VERIFICATION

The water sampling results are reviewed for timeliness in completing requirements and analyzing contamination trends. The monitoring site plan locations are reviewed and documentation is updated. Proper public notice history has been completed as applicable, including lead and copper.

# **8. OPERATOR COMPLIANCE**

All NN water systems are required to have a certified operator either on staff or contracted for their system at all times. Your DNR representative will review the current status of licenses during the sanitary survey. For more information, visit the operator certification program webpage.

## **Required Actions And Recommendations**

Issues identified during a sanitary survey are assigned one of four categories based on the severity of the issue. These categories include:

- Significant Deficiencies indicate defects or failures with the water system that pose a health risk to consumers. Examples include the absence of a well seal, broken conduit, damaged or compromised well casing, and improper treatment equipment and/or maintenance.
- **Deficiencies** are problems in the drinking water system that have the potential to cause serious health risks or represent long-term health risks to consumers. Deficiencies may indicate noncompliance with one or more Wisconsin Administrative Codes. Examples include unprotected cross connections, threaded raw water sample taps, lack of a proper entry point sample tap and other water system components that do not meet code requirements.
- **Recommendations** are made to address problems in the water system that may prevent it from consistently providing safe drinking water to consumers. Examples include painting your well casing to help prevent corrosion, replacing lead fixtures with certified lead free fixtures and installing smooth bore sample taps for bacteria distribution samples.
- Non-Conforming Features are system features that met code requirements at the time of a drinking
  water system's construction, but do not meet current code. These are not considered deficiencies;
  however, they will need to be corrected in the future when the system completes any major
  upgrades. If the department determines a health risk exists due to the non-conforming feature, the
  department may require a correction sooner. Examples include grout sealing material, well casing
  depth, well casing height above grade and updating to current code requirements when doing work
  on the water system.

Sanitary survey reports will include required actions or recommendations to resolve issues. Required actions will include a due date by which the work is to be completed. Well, pump and plumbing corrective action work should be completed by contractors with the appropriate state-required well drilling, pump installing or plumbing licenses.

#### HOW CAN I PREPARE FOR A NON-TRANSIENT NON-COMMUNITY SANITARY SURVEY?

Once your site visit is scheduled, you can do the following to be prepared for an inspection of your facility:

- Review the Common Issues Identified During an NN Sanitary Survey fact sheet.
- Make sure areas are clean and accessible for the site visit, including the well, pump area, storage tanks, water treatment equipment and distribution sample sites.
- Provide updates for owner and sampler contact information. Contact information includes name, address, phone and e-mail.
- Provide well construction information if the water system is new or if a new wellwas constructed.
- Review water treatment maintenance records.
- Existing systems may review the monitoring site plan that lists approved water sample locations.
- Existing systems may review past water sample results for any noticeable trends in water quality.
- Existing systems may review any past water system deficiencies that have not been completed and if possible complete the work prior to the site visit.
- Existing systems may review public notice requirements that have not been completed and take action to complete the notice.

#### REFERENCES

- Visit the Wisconsin Public Drinking Water System website to review the system watersampling history, deficiencies and public notice requirements.
- Find directions on using the Public Drinking Water System here.
- Access to Wisconsin State Administrative Codes for Water Supply here.
- Find a list of licensed well drillers here.
- Find a list of licensed pump installers here.
- For more information regarding Non-Transient Non-Community water systems, <u>visit this</u> website.
- Find your county DNR Drinking Water and Groundwater staff here.

This document is intended solely as guidance and does not contain any mandatory requirements except where requirements found in statute or administrative rule are referenced. Any regulatory decisions made by the Department of Natural Resources in any matter addressed by this guidance will be made by applying the governing statutes and administrative rules to the relevant facts.

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