

Drinking Water & Groundwater Program

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Guidance for Correction of Non-Conforming Features with Reviewable Projects

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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.

Purpose: This guidance is intended to be used as a guide for plan review to identify which nonconforming features (NCFs) must be corrected with reviewable projects. This guidance can also be used as a guide to water system representatives and consultants in the project planning process to determine which non-conforming features must be corrected with a reviewable project.

Background: "Non-conforming features" are drinking water system features that met code requirements at the time of a water system's construction but do not meet current code. As established in NR 811.01, Wis. Adm. Code, when water system improvements are undertaken, facilities are required to be upgraded to meet the minimum standards established in ch. NR 811, Wis. Adm. Code. This entails the correction of applicable non-conforming features with reviewable projects. A reviewable project is defined in s. NR 108.02 (13)(b) as any improvements, extensions or alterations which may affect the quality or quantity of water delivered by an existing community water system.

This guidance was created by the department's Public Water Engineering Section to ensure consistency in program implementation by assisting DNR plan review staff determine which non-conforming features are required to be corrected based on project type.

Document Organization: This document is organized in a table which outlines common project types and the type of applicable non-conforming features that may be present and lists if those non-conforming features need to be corrected as part of the project.

Periodic Review Required: This document will be periodically reviewed by the department's Public Water Engineering Section.



Non-Conforming Features:

Determining Whether Correction of Non-Conforming Features is Required within a Reviewable Project: "Non-conforming features" are drinking water system features that met code requirements at the time of a water system's construction but do not meet current code. As established in NR 811.01, Wis. Adm. Code, when water system improvements are undertaken, facilities are required to be upgraded to meet the minimum standards established in ch. NR 811, Wis. Adm. Code. This matrix is intended to guide decisions about whether correction of a non-conforming feature which has not been previously identified or does not have prescribed correction conditions in the sanitary survey is required when certain types of improvements are undertaken.

The criteria for determining whether correction is required are as follows:

- Correction reasonably falls within the scope of the reviewable project based on physical location of the project
- Correction reasonably falls within the scope of the project based on type of equipment or contractor required to perform the work

Note: This guidance is not intended to affect any corrective action deadlines previously established within a sanitary survey report or enforcement agreement.

Chemical Feed Equipment Projects

Project Type	Non-conforming feature	Corrected with Project?
Chemical Feed Pump Replacement (different size/type)	No secondary containment	Not required, but ask/identify
	No tank ventilation	Not required, but ask/identify
	Tank oversized	Yes. Install maximum fill line; OR replace w/ appropriately sized tank and install secondary containment and any required venting
	Chemical injection of chemical is not in the lower half of horizontal pipe	Not required, but ask/identify
	Chemical injection of chemical is physically incorrect based on piping, appurtenances and/or sequence of other chemical injection	Yes
	Incompatible chemicals (i.e. fluoride)	Not required, but ask/identify
	Chemical injection of liquid chemical location not under continuous positive pressure	Yes
	No tank ventilation	Not required, but ask/identify
	Tank oversized	Yes. Install maximum fill line; OR replace w/ appropriately sized tank
Addition of Secondary	Location of chemical injection	Not required, but ask/identify
Containment	Incompatible chemicals (i.e. fluoride)	Not required, but ask/identify
	Chemical injection location not under continuous positive pressure	Yes
	Chemical feed pump improperly sized	Not required, but ask/identify
	No secondary containment	Yes
	No tank ventilation	Yes, if fluoride or ammonia
	Location of chemical injection	Not required, but ask/identify
Chemical Storage Tank	Incompatible chemicals (i.e. fluoride)	Not required, but ask/identify
Replacement	Chemical injection location not under continuous positive pressure	Yes
	Chemical feed pump improperly sized	Yes, if pump is running at maximum. If not, not required, but ask/identify

Project Type	Non-conforming feature	Corrected with Project?
Chemical Injection Location Change	No secondary containment	No
	No tank ventilation	No
	Tank oversized	No
	Location of chemical injection (other chemicals)	Yes
	Incompatible chemicals (i.e. fluoride)	No
	Chemical injection location not under continuous positive pressure	Yes
	Chemical feed pump improperly sized	No

Well Pump & Discharge Piping Projects

Project Type	Non-conforming feature	Corrected with Project?
Well Rehab	Undersized well vent	No
	Pump base too short	No
Well Pump Base Modifications	Undersized well vent	Yes
	Pump base too short	Yes
Pump Discharge Piping Replacement	No pump to waste	Yes
	Chemical feed not into bottom of pipe	Yes
	Fluoride stored in pump control room	No, but ask if corrosion is an issue
	Air-vacuum relief piping not metal	Yes
Well Pump Replacement (not in kind)	Undersized well vent	Yes
	Pump base too short	Yes

Pumphouse Reconstruction Projects

Project Type	Non-conforming feature	Corrected with Project?
Pumphouse Reconstruction	All pumphouse and chemical feed NCFs to be corrected	

Water Storage Structures Projects

Project Type	Non-conforming feature	Corrected with Project?
Tank Painting	No chlorination tap	Yes; if practical
	Base floor drain discharges to sewer	Yes, if the sewer manhole rim is <1ft below the floor elevation of tank base
	No sample tap	Yes; if practical
	Mushroom cap not frost-proof	Yes
	Overflow non complying	Yes
	Access tube gaps	Yes
	No chlorination tap	Yes; if practical
	Floor drain not discharge to ground surface	No
	No sample tap	Yes; if practical
Mixer Installation	Mushroom cap not frost-proof	No
	Overflow non complying	No
	Access tube gaps	No. Refer any suspected access tube gap to DNR Rep for compliance determination and follow up action.
	No chlorination tap	No
	Base floor drain discharges to sewer	No
	No sample tap	No
Vent Modifications	No reservoir membrane covering	No
	Overflow non complying	Yes
	Access tube gaps	Yes
	No chlorination tap	No
	Base floor drain discharges to sewer	No
	No sample tap	No
Overflow Modifications	Mushroom cap not frost-proof	No
	No reservoir membrane covering	No
	Access tube gaps	No. Refer any suspected access tube gap to DNR Rep for compliance determination and follow up action.