

**Water Division
Bureau of Drinking & Groundwater**

Public Water Program

The attached inspection form “Water Storage Facility Inspection Report, 3300-248” was updated to reflect code changes and field conditions identified by consultants and DNR staff since its last update in 1999. The form is required for water storage facilities pursuant to ch. NR 810.14. The authority to promulgate and enforce this form is contained in chs. 280 and 281. This document may also be useful for external stakeholders, including professional tank inspection firms and Professional Engineers, to help document compliance with facility inspections.

This draft form was developed by a workgroup that included two tank inspection firms and public water supply engineers and specialists. Michael Blodgett sponsored the workgroup and Charlie Cameron (Charlie.Cameron@Wisconsin.gov) was lead. The draft has been shared with staff for comments and is now being shared with the general public for comment. The inspection document was first released in draft form to externals in April, 2015. The final form will be made available on the DNR website for use.

The DG Program is now soliciting comments from the public on this inspection form. Once the 21 day notice period is complete, all comments will be considered, revisions will be made to the guidance documents as needed, and final guidance will be made available to internal and external stakeholders. Comments related to this draft guidance document should be sent to Michael.Blodgett@Wisconsin.gov.

SECTION E – SPECIFIC INSPECTION OBSERVATIONS

Describe observations: note whether each element is satisfactory (S), unsatisfactory (U), or is not present (not applicable – N/A). If a rating is unsatisfactory, provide an explanation to the right of the element and/or provide this information in attached documentation by referencing the inspection element’s identification number.

ID	S	U	N/A	Site or Property Assessment
1				Roads and Accessibility
2				Positive Drainage
3				Vegetation (top and sides)
4				Lighting
5				Fencing
6				Security
ID	S	U	N/A	Miscellaneous or Ancillary Equipment
7				Steps and Platforms
8				Lad Safes, Rungs, Friction Brakes, Harness and Attachment
9				Safety Rails, Catwalks
10				Painter Rings and Brackets
11				Electrical Wiring/Conduits/Junction Boxes
12				Cathodic Protection System: Wiring, Anodes, Support
13				Aviation Lights
14				Antennae
15				Riser Expansion Joint, Pipe, and Hardware
16				Chemical Injection Tap/Port
17				Sample Tap
18				Freeze Protection
ID	S	U	N/A	Valve Vault
19				Structure or Housing
20				Drain/Sump
21				Valves/Piping
22				Electrical Equipment
23				Security
ID	S	U	N/A	Controls
24				Method Used to Control Water Level (also note the type used)
25				Penetration and Seal Integrity
26				Electrical Equipment and Wiring
27				Floats, Switches, Sensors
28				Mercury Switches
29				Control/Electrical Box Security
ID	S	U	N/A	Mixing
30				Mixing Method
31				Penetration and Seal Integrity
32				Operation and Functionality
33				General Effectiveness

ID	S	U	N/A	Access
34				Structure and Associated Parts
35				Steel/Metal Structures (pits, corrosion, holes, buckling, etc.)
36				Lip Distance to Ground/Roof Surfaces
37				Lip, Hatch, and Hatch to Lip Overlap
38				Fit, Seal, Gaskets
39				Locking System and Security
40				Access Tube Expansion Gasket/Boot/Seal (CBI type units)
ID	S	U	N/A	Vents
41				Number and Size(s)
42				Structure and Associated Parts
43				Distance to Ground/Roof Surfaces (feet)
44				Screen Mesh Size (number of strands per linear inch)
45				Screen Corrosion Resistance
46				Screen (attachment method, coverage, integrity)
47				Rain, Drip, Wind Shield
48				Pressure Pallets (release/screen)
49				Security Shroud/Hood/Device
ID	S	U	N/A	Overflow
50				Number and Sizes (diameter)
51				Pipe Material (non-metal is prohibited)
52				Pipe Integrity
53				Air Break Distance to Splash Pad (12" to 24" required)
54				Screen Mesh Size (number of strands per linear inch)
55				Screen Corrosion Resistance
56				Screen (attachment method, coverage, integrity)
57				Flapper
58				Splash Pad (material and integrity)
59				Head Wall
60				Erosion Protection
61				Drainage (positive and safe)
62				Security Shroud/Hood
63				Overflow Test Results (if overflow was tested on inspection)
ID	S	U	N/A	Foundation and Anchoring
64				Supporting Soils (settling, erosion, leak evidence)
65				Final Grade is 4" to 6" Below Base Plate
66				Concrete (spall, crack, rebar, corrosion, efflorescence, etc.)
67				Anchors (anchor, bolt, thread condition/fully threaded/tight)
68				Chairs (cleanliness and condition)
69				Leg Struts and Connections
70				Column Shoes/Riser Plates (erosion/corrosion/grout seal)
71				Wind Rods (condition, tightness, pins properly secured)
ID	S	U	N/A	Internal Observations (ceiling, walls, floor, other)

72				Compatible Materials (no wood, lead, mercury, coal tar, etc.)	
73				Drain, Sump, Silt Trap	
74				Control Valves and Pipes	
75				Equipment Support Systems	
76				Penetration Points (seals, integrity, etc.)	
77				Roof Support System (trusses, rafters, welds, etc.)	
78				Concrete (spall, crack, rebar, corrosion, efflorescence, etc.)	
79				Pre-stressed Concrete (seams, anchors, wire winding)	
80				Steel/Metal Structures (pits, corrosion, holes, buckling, etc.)	
81				Internal Membrane	
82				Seams (welds, gaskets, bolts, rivets, seals, etc.)	
83				Mastics (gaskets, caulk, mortar, grout, rubber, epoxy, etc.)	
84				Surface Coating (paint, rubber, glass, epoxy, etc.)	
85				Paint Testing (thickness, adhesion, etc.)	
86				Ice/Freezing Protection (explain any damage)	
ID	S	U	N/A	External Observations (roof, walls, and other)	
87				Roof and Sidewall Drainage	
88				Cover Material (sod, foam, etc.)	
89				External Membrane	
90				Equipment Support Systems	
91				Penetration Points (seals, integrity, etc.)	
92				Riser and Stay Rods	
93				Piping and Valves	
94				Concrete (spall, crack, rebar, corrosion, efflorescence, etc.)	
95				Pre-stressed Concrete (seams, anchors, wire winding)	
96				Steel/Metal Structures (pits, corrosion, holes, buckling, etc.)	
97				Seams (welds, gaskets, bolts, rivets, seals, etc.)	
98				Mastics (gaskets, caulk, mortar, grout, rubber, epoxy, etc.)	
99				Surface Coating (paint, rubber, glass, epoxy, etc.)	
100				Paint Testing (thickness, adhesion, etc.)	
101				Ice/Freezing Protection (explain any damage)	

SECTION H – REPAIRS COMPLETED

Describe repairs made to the water storage facility or associated parts. Include names of any products used to coat or seal internal surfaces. Detailed information can be provided in supporting documentation attached to this form. Please note: WDNR plan review and approval is required prior to applying products to water storage facilities; and may be required for modification and repairs.

SECTION I – RECOMMENDATIONS

Detailed information can be provided in supporting documentation attached to this form.

SECTION J - REPORTING CHECKLIST

Use the checklist below to ensure the form and submittals are complete.

Supporting Documentation (check all that apply)	<input type="checkbox"/> Pictures	<input type="checkbox"/> Video	<input type="checkbox"/> Sample Results
Unsatisfactory Observations Described	<input type="checkbox"/> Yes	<input type="checkbox"/> No	<input type="checkbox"/> N/A
Repairs Described	<input type="checkbox"/> Yes	<input type="checkbox"/> No	<input type="checkbox"/> N/A
Recommendations Described	<input type="checkbox"/> Yes	<input type="checkbox"/> No	<input type="checkbox"/> N/A
Written Report and Supporting Documentation Sent to Owner	<input type="checkbox"/> Yes	<input type="checkbox"/> No	

SECTION K – SIGNATURES

I certify that the information provided on this form is accurate and true to the best of my ability.

Inspection Agent Signature	Date
Municipal Official or Owner Signature	Date