



**HO-CHUNK NATION CODE (HCC)  
TITLE 3 – HEALTH AND SAFETY CODE  
SECTION 7 – WATER UTILITY ORDINANCE**

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**CHAPTER I  
GENERAL PROVISIONS**

**1. Authority.**

a. Article V, Section 2(a) of the Constitution grants the Legislature the power to make laws, including codes, ordinances, resolutions, and statutes.

b. Article V, Section 2(h) of the Constitution grants the Legislature the power to enact all laws prohibiting and regulating conduct, and imposing penalties upon all persons within the jurisdiction of the Nation.

c. Article V, Section 2(l) of the Constitution grants the Legislature the power to enact laws to manage, lease, permit, or otherwise deal with the Nation’s lands, interests in lands or other assets.

d. Article V, Section 2(o) of the Constitution grants the Legislature the power to enact laws to regulate and zone any lands within the jurisdiction of the Ho-Chunk Nation.

e. Article V, Section 2(s) of the Constitution grants the Legislature the power to promote public health, education, charity, and such other services as may contribute to the social advancement of the members of the Ho-Chunk Nation.

f. Article V, Section 2(t) of the Constitution grants the Legislature the power to enact laws governing law enforcement on lands within the jurisdiction of the Nation.

**2. Findings.**

a. It is in the best interest of the Nation to monitor the water usage of all customers so that system planning, system repair and financial stability can be accomplished.

b. It is in the best interest of the Nation and its water system users to protect the systems from the possibility of contamination or pollution by isolating within its internal distribution system such contaminants or pollutants which could backflow or back-siphon into the public water system.

c. The value of community drinking water fluoridation, as a method for reducing tooth decay, is well documented.

**3. Purpose.**

a. This Ordinance is enacted to monitor, regulate and protect the public potable water supply served by the Ho-Chunk Nation Department of Housing and its utility department.

b. It will provide for the maintenance of a continuing program of cross-connection control which will effectively prevent the contamination or pollution of all potable water systems by cross-connection. It will promote the elimination or control of existing cross-connections, actual or potential, between its customer's in-plant potable water systems and non-potable systems.

c. Because the Ho-Chunk Nation recognizes that any additive to the community water systems has potential risks, this Ordinance will promote the safety necessary when using the fluoridation process. The drinking water fluoridation process will be subject appropriate testing, system monitoring and reporting

**4. Declaration of Policy.**

a. It is the policy of the Nation to regulate and control the potable water systems owned by the Nation through a mandatory and enforceable program to protect, promote, and preserve the health and general welfare of the public. This shall include all community and non-community water systems.

b. The Ho-Chunk Nation adopts the State of Wisconsin Plumbing Code, specifically Wisconsin Administrative Code, Chapter Comm 81, Definitions and Standards, Chapter Comm 82, Design, Construction, Installation, Supervision and Inspection of Plumbing and Chapter Comm 84, Plumbing Product as the code that shall govern all plumbing installation on Ho-Chunk Nation property. This code applies to all plumbing projects on trust land and fee-simple land owned by the Nation.

c. When Ho-Chunk Nation development occurs on fee-simple land, the laws developed by the State of Wisconsin through its Department of Commerce and Department of Natural Resources have jurisdiction.

d. The United States Department of Health and Human Services and the Center for Disease Control and Prevention (CDC) has issued standards for community water fluoridation entitled, *Engineering and Administrative Recommendations for Water Fluoridation, 1995 (EARWF)*. It is the intent of this Ordinance to operate the Ho-Chunk Nation community water systems using these recommendations whenever possible.

e. It is not intended by this Ordinance to repeal, abrogate, annul, impair or interfere with existing Ho-Chunk law or adopted law. Whenever this Ordinance imposes greater restrictions, the provisions of this Ordinance shall apply.

5. **Jurisdiction.** The jurisdiction of this Ordinance shall include all lands held by the Nation or the People, or by the United States for the benefit of the Nation or the People, and any additional lands acquired by the Nation or by the United States for the benefit of the Nation or the People, including but not limited to air, water, surface, subsurface, natural resources and any interest therein, notwithstanding the issuance of any patent or right-of-way in fee or otherwise, by the governments of the United States or the Ho-Chunk Nation, existing or in the future. In addition, it shall extend to any and all tribal lands as defined herein and persons or activities therein.

6. **Interpretation.** Where a provision of this Ordinance correlates with Wisconsin Statutes or with a standard in Wisconsin Administrative Code, and where the Ordinance provision is unclear, the provision shall be interpreted in light of the current Wisconsin law in effect, as long as consistent with Ho-Chunk Nation law.

7. **Applicability.**

a. This Ordinance shall apply to all homes, program buildings, enterprises and temporary customers served by water from community and non-community water systems owned by the Ho-Chunk Nation.

b. This Ordinance shall apply to any new installation of water systems, or the major alteration of an existing water facility, undertaken after the effective date of this Ordinance. While modernization of existing water facilities is not required, it is expected that facilities, which do not meet the standards of this Ordinance will be made to comply at the earliest possible time.

c. The rules and regulations of this Ordinance shall apply to every person, company, or corporation who is utilizing Ho-Chunk Nation water utility services.

8. **Department Responsibility.**

a. The Department of Housing (Department), as the entity directly responsible for the operation and maintenance of water utility services, is charged with the primary responsibility for administering and enforcing the provisions of this Ordinance.

b. It shall be the responsibility of the Department to have a certified water system operator responsible for implementing the fluoridation provisions of this Ordinance on Ho-Chunk Nation trust lands. For drinking water systems regulated by the State of Wisconsin that are located on non-trust properties the operator shall meet the certification requirements of the Wisconsin Department of Natural Resources NR 114 Certified Operator Program.

9. **Utility Responsibility.**

a. It is expressly stipulated that no claim shall be made against the Ho-Chunk Nation, or the Department, by reason of breaking, clogging, stoppage, or freezing of any service pipe, or from any damage from repairing mains, making connection or extensions or any other work that may be deemed necessary. The Department reserves the right to cut off service at any time for the purpose of repairs or any other necessary purpose, any regulation to the contrary notwithstanding. Whenever it shall become necessary to shut off the water, the Department shall, if practicable, give notice to each and every consumer within the affected service area of the time when such service will be shut off.

b. Utility Service Rates. The Department shall adopt standard rates for utility service charges and revise said rates when they deem necessary.

c. Maintenance. All public water distribution system components within the jurisdiction of this Ordinance up to the curb stop of the users premises will be maintained by the Department without expense to the property owner, except when they are damaged as a result of the negligence or carelessness on the part of the user of the premises or business, in which case these components and/or systems will be repaired at the expense of the property owner. Any fees for such repair will be added on to the next regular billing invoice for service to the premises. Water service laterals, being the piping from the curb stop to the home, must be maintained free of defective conditions, by and at the expense of the owner or occupant of the property. All other water delivery piping within the house shall be maintained in a manner which does not cause unreasonable water loss. Owner or occupant failure to diligently repair leaks to the water service laterals or piping within the house, which are determined to cause unreasonable water loss to the public water distribution system will result in discontinuance of water service until the owner makes the necessary repairs. A failure by the owner or occupant to make the necessary repairs within a reasonable time will authorize the Department to seek an order of the Trial Court evicting the occupant(s) of the premises and/or authorizing the Department to make the repairs and collect the cost of same as a debt to the Nation. In the event such repairs are called for, all costs of labor, materials, and other necessary and reasonable costs will be charged to the owner and/or occupant of the premises. No offsets of lost income or additional costs to either the owner or occupant of the premises will be allowed as a result of the Department having to gain such an order from the Trial Court.

10. **Liability.** The Nation shall not be liable for any damages resulting from stoppage of the supply or flow of water as the result of breaks in any mains, service pipes, or fixtures, or by reason of the breaking of machinery or stoppage for necessary repair, or any other interruption of service.

11. **Definitions.** For the purposes of this Ordinance, the following definitions shall apply:

a. "Air Gap" means a physical separation sufficient to prevent backflow between the free-flowing discharge end of the potable water system and any other system. Physically defined as a distance equal to twice the diameter of the supply side pipe diameter but never less than one (1) inch.

b. “Atmospheric Vacuum Breaker” means a device that prevents back-siphonage by creating an atmospheric vent when there is either a negative pressure or sub-atmospheric pressure in a water system.

c. “Auxiliary Water Supply” means any water supply, on or available, to the premises other than the Nation’s approved public potable water supply.

d. “Backflow” means the flow of water or other liquids, mixtures or substances, under positive or reduced pressure in the distribution pipes of a potable water supply from any source other than its intended source.

e. “Backflow Preventer or Backflow Prevention Device” means a device or means designed to prevent backflow or back-siphonage. Most commonly categorized as air gap, reduced pressure principle device, double check valve assembly, pressure vacuum breaker, atmospheric vacuum breaker, hose bib vacuum breaker, residential dual check, double check with intermediate atmospheric vent, and barometric loop.

f. “Backpressure” means a condition in which the owner’s system pressure is greater than the supplier’s system pressure.

g. “Barometric Loop” means a fabricated piping arrangement rising at least thirty-five (35) feet at its topmost point above the highest fixture it supplies to prevent back-siphonage.

h. “Back-siphonage” means the flow of water or other liquids, mixtures or substances into the distribution pipes of a potable water supply system from any source other than its intended source caused by the sudden reduction of pressure in the potable water supply system.

i. "Complaint" means a person's grievance regarding a decision made by the Department of Housing.

j. “Community Water System” means a public water system that serves at least 15 service connections used by year-round residents or regularly serves at least 25 year-round residents. Any public water system serving 7 or more homes, 10 or more mobile homes, 10 or more apartment units, or 10 or more condominium units shall be considered a community water system unless information is available to indicate that 25 year-round residents will not be served.

k. “Contaminant” means a substance that will impair the quality of the water to a degree that it creates a serious health hazard to the public leading to poisoning or the spread of disease.

l. “Cross-Connection” means any actual or potential connection between the public water supply and a source of contamination or pollution.

- m. “Department” means the Department of Housing.
- n. “Double Check Valve Assembly” means an assembly of two (2) independently operating spring loaded check valves with tightly closing shut-off valves on each side of the check valves, plus properly located test cocks for the testing of each check valve.
- o. “Double Check with Intermediate Atmospheric Vent” means a device having two(2) spring loaded check valves separated by an atmospheric vent changer.
- p. “Enterprise” means a connection to the Community Water System that is a business entity.
- q. “High Hazard Situation” means a current or potential risk of a cross connection or backflow situation that could cause serious sickness or death to users of the water from the system.
- r. “Homes” mean all places of residence including, but not limited to houses and trailers connected to the Community Water Systems.
- s. “Hose Bib Vacuum Breaker” means a device that is permanently attached to a hose bib and which acts as an atmospheric vacuum breaker.
- t. “Low Hazard Situation” means a current or potential risk of a cross connection or backflow situation that would not cause serious sickness or death to users of the water from the system.
- u. "Major Alteration" means any repair, addition, or improvement to a water facility costing in excess of \$100.00 for a dwelling and \$2,000.00 for a non-dwelling unit.
- v. “Meter or Water Meter” means a device used to measure the amount of water used by a customer of the Community Water System.
- w. “Nation” means the Ho-Chunk Nation.
- x. “Non-Community Water System” means a public water system that serves non-residential customers and includes Transient Non-community (TNC) water systems and Non-transient Non-community (NTNC) water systems.
- y. “Non-Transient Non-Community Water System” means a public water system that serves non-residential consumers (transient), but it serves the same 25 or more people at least 6 months out of the year.
- z. “Operator or Water Operator” means a staff person employed by the Department of Housing whose sole responsibility is to operate the Potable Water Systems.

aa. "Owner" means any person who has legal title to, or license to operate or habitat in, a property upon which a cross-connection inspection is to be made or upon which a cross-connection is present.

bb. "Person" means any individual, partnership, company, public or private corporation, political subdivision or agency of the Nation or any other legal entity.

cc. "Plumbing Code" means the plumbing regulations found in Chapters 81, 82, and 84 of the Wisconsin Department of Commerce code.

dd. "Pollutant" means a foreign substance, that if permitted to get into the public water system, will degrade its quality so as to constitute a moderate hazard, or impair the usefulness or quality of the water to a degree which does not create an actual hazard to the public health but which does adversely and unreasonably effect such water for domestic use.

ee. "Potable Water System" means a water system providing water intended for consumption by humans.

ff. "Pressure Vacuum Breaker" means a device containing one or two independently operated spring loaded check valves and an independently operated spring loaded air inlet valve located on the discharge side of the check or checks. The device includes tightly closing shut-off valves on each side of the check valves and properly located test cocks for the testing of the check valve(s).

gg. "Program Buildings" means all connections to the Community Water System that house in part or in total a program of the Ho-Chunk Nation such as educational facility, community center, feeding site or recreational facility.

hh. "Public Water System" means any water system that serves at least 25 persons at least 60 days per year.

ii. "Reduced Pressure Principle Device" means an assembly consisting of two (2) independently operating check valves with an automatically operating differential relief valve located between the two (2) check valves, tightly closing shut-off valves on each side of the check valves plus properly located test cocks for the testing of the check valves and the relief valve.

jj. "Request" means an individual requesting service such as repairs or connections.

kk. "Residential Dual Check" means an assembly of two (2) spring-loaded independently operating check valves without tightly closing shut-off valves and test cocks. This is generally employed immediately downstream of the water meter to act as a containment device.

ll. "Serve" means having water available for people to drink.



mm. "Transient Non-community Water System" means a public water system that serves transient non-residential consumers. This type of system serves at least 25 persons a day for at least 60 days per year, but those served change from day to day.

nn. "Tribal Lands" mean all lands to which title thereto is held by the Nation, or for the benefit of the Nation, and any lands held in the name of one or more Tribal member(s) to which water utility service is provided by the Nation.

oo. "User" means the entity using the Nation's property or the person or entity that owns the property and is using the water supplied by the community water systems.

pp. "Utility" means public water systems, including wells, reservoirs, pumping equipment, water treatment systems, distribution mains, buildings and appurtenances; all vehicles, equipment, tools, structures, buildings, sites, easements, rights of way and all things necessary for the operation and maintenance of services provided.

## **CHAPTER II**

### **REGULATIONS**

#### **12. Water Service.**

a. Whenever running water is supplied to a building after enactment of this Ordinance, connection shall be made, whenever possible, to a public water system which has been inspected and approved by the Department or the Ho-Chunk Nation Department of Health and Social Services. Where an approved public water system is not available an individual water system (well) shall be acceptable, providing that system has been tested and approved as safe and sanitary by either the Department or the Ho-Chunk Nation Department of Health and Social Services.

b. Application for Service.

(1) Every person requesting the utility service shall file an application in writing to the Department in such form as is prescribed for that purpose. Such applications shall be available from the Department. The application must specify the service requested in order to provide adequate service. Any approved applicant will have a meter installed at the applicant's residence or place of business.

(2) If the applicant is not the owner of the premises, the written consent of the owner must accompany the application.

(3) The Department may require each consumer to pay a cash deposit prior to service beginning to guarantee payment of all charges for such service, and to pay for meter installation and use. Such deposits will be refunded to the applicant after one year of timely payments, or when the user moves from the premises, whichever is first. A subsequent monetary deposit will be required to insure continued service in the event the consumer fails

to make timely payments, and the Department commences action to collect the late payments in accordance with Section 16.

c. Installations and Alterations.

(1) Installations and major alterations of a public water system shall be undertaken only by a State of Wisconsin-licensed or duly qualified plumber, shall be executed in a safe, neat and workmanlike manner, and shall meet the material and installation standards of this ordinance. All work shall have an approved design and shall meet the specifications established in Standard Specifications for Sewer and Water Construction in Wisconsin. All installation shall be done in accordance with standards established in Standard Specifications for Sewer and Water Construction in Wisconsin.

(2) The Department of Health and Social Services shall be responsible for design approval. All contractors must provide notification to the Department of Health and Social Services prior to starting a construction project on a public water system.

d. Materials. The materials used shall be new and durable. The size of the pipe shall be adequate in relation to the fixture served.

e. Exterior Water Lines. Water service line may be laid in solid ground, below the frost line. Water service line may be laid in same trench as sewer line, providing water line is not less than one foot higher than sewer line and laid to one side on a solid ledge of ground.

f. Maintenance.

(1) All public water distribution systems components subject to this ordinance shall be maintained in a safe and sanitary condition by the Department.

(2) All users shall keep their lateral water service pipes in good repair and protected from frost, at their own risk and expense, and shall prevent any unnecessary waste of water.

(3) Every user shall permit the Department, or the its duly authorized agent, at all reasonable hours of the day, to enter their premises or building to examine the water system pipes and fixtures, and/or the manner in which the water is being used within the home or business when the Department has reason to believe repairs are necessary or that a violation of this ordinance has occurred or is continuing.

**13. Water Meters.**

a. Control and Regulation. The Nation shall exclusively own and control the water meters to be used in the water system. All water meters shall be installed in accordance with the following regulations:

(1) Meters shall be required for every connection to the community water system.

(2) The Department shall furnish and install all meters for services of one (1) inch or less in diameter.

(3) For all connections larger than one (1) inch, the meter shall be supplied by the program or enterprise requiring the connection and will be installed by the program or enterprise under the guidance of the Water Operator.

(4) No person not authorized by the utilities superintendent shall connect, disconnect, take apart, or in any manner change or interfere with any such meter or its use.

(5) It shall be unlawful for anyone to misread or to tamper with any meter so as to avoid charges for water.

(6) It shall be unlawful for anyone to bypass a meter, or otherwise use the Nation's water without making just compensation except as may be specifically authorized by the Department.

(7) The service pipe from the water main to the stop box, and the stop box and cover at the main and boulevard are the property of the Ho-Chunk Nation and all persons are forbidden to interfere with them.

(8) The service pipe from the stop box to the meter and the connections thereto shall be the property of the user. The pipe must be protected and maintained by the user. In the event such user shall fail to make any necessary repairs to such service connections or pipe within twenty-four (24) hours after being notified to do so by the Water Operator, the Water Operator shall disconnect the water from the premises and proceed with the repair of the service. The cost of repair will be the responsibility of the user. If any meters are damaged by freezing, hot water, etc., either by carelessness or neglect of the owner or occupant of the premises or other agents, the owner or occupants must pay for the repairs of such damages. The cost of ordinary maintenance and repairs of all meters owned by the Nation shall be borne by the Nation.

b. Installation. The installation of the meter shall be installed as follows:

(1) The service line pipe from the water main to the meter shall be 1 inch polyethylene for residential connections, unless otherwise directed by the Water Operator. The service line pipe for other connections shall be determined by the usage requirements of the system and made of a material approved by the Water Operator.

(2) The service pipe from the water main to the meter shall be brought through the floor in a vertical position where the pipe enters the building. The stop and waste valve shall be a minimum of 12 inches above the floor.

(3) The meter shall be so located that the bottom is from twelve to eighteen inches above the finished floor line. The meter shall not be set more than twelve inches,

measured horizontally, from the inside line of the basement wall. Deviation from these standards may be made only with written permission of the Water Operator. An approved yoke or horn shall be provided to support the meter in the proper vertical position. Meters larger than one inch shall be set on a pedestal.

(4) Each meter installation shall have a stop and waste valve on the street side of the meter. In no case shall more than 12 inches of pipe be exposed between the point of entrance through the basement floor and the stop and waste valve. A stop and waste valve shall also be installed on the house side of the meter.

(5) The water service connecting with the main shall not be run within any structure or under any basement floor for a distance of more than two feet, measured from the inside foundation wall, before being connected to the water meter.

(6) The consumer is prohibited from obstructing the meter so as to prohibit the reading, or repairing of the meter.

(7) Curb stop boxes shall generally be installed where desired by the owners of occupied properties, but they shall be placed as near as possible to the curb if on a street or within the road easement.

c. Complaints and Meter Testing.

(1) When a consumer complains that the bill for any past service period is excessive, the Department shall have the meter re-read on request. If the consumer remains dissatisfied, he/she may, on written request, have the meter tested. If the test shows an error in Department's favor exceeding five percent of the water consumed, an accurate meter shall be installed, and the bill shall be adjusted accordingly. Such adjustment shall not extend back more than one billing period from the date of the written request.

(2) When the Department is concerned about the accuracy of the meter, the Department shall have the meter inspected at the expense of the Department. If the test shows an error in the customer's favor exceeding five percent of the water consumed, the meter shall be repaired or an accurate meter shall be installed, and the bill shall be adjusted accordingly. Such adjustment shall not extend back more than one billing period from the date of the meter inspection.

(3) The expense of meter replacement or repair shall be the responsibility of the Department.

**14. Cross Connection Control.** The provisions of this section set forth the requirements for the protection of the Nation's potable water within water supply systems when and where there is the possibility of contamination due to cross connections or backflow conditions and this shall be called a Cross Connection Program.

a. Control and Regulation.

(1) The Department shall operate a cross-connection control program, to include the keeping of necessary records, which fulfills the requirements of the Nation's Cross-Connection Regulations and is approved by the Nation.

(2) The Owner of buildings connected to the water system shall allow the property to be inspected for possible cross-connections and backflow conditions and shall follow the provisions of the Department program and install the required protection if a cross-connection is to be permitted.

(3) Backflow prevention devices have the following controls:

(a) All residential backflow prevention devices shall be the property of the Utility and shall be maintained by it.

(b) All non-residential backflow devices larger than a one-inch double check valve at the entrance to the facility and within the facility shall be owned by the facility where they are installed and shall be maintained and inspected at the owner's expense. All replacement devices will be at the owner's expense.

(c) All backflow prevention devices shall remain accessible to Utility personnel and no person shall obstruct or tamper with any device.

(d) Any obstruction or tampering shall be a violation of this Ordinance and subject the violator to actual damages and civil penalties under this ordinance. The assignee of the property on which the device is located shall be responsible for all damage to the device.

(e) If the Department determines at any time that a serious threat to the public health exists, the water service will be terminated immediately.

(f) The Department is authorized and directed to discontinue water service after reasonable notice to any property wherein any connection in violation of this Ordinance exists, and to take such precautionary measures deemed necessary to eliminate any danger of contamination of the community water system supply. Water service to such property shall not be restored until the cross connection(s) has been eliminated in compliance with the provisions of this Ordinance.

b. Requirements.

(1) All facilities/structures that are connected to the community water system are required to install a backflow prevention device. All backflow prevention devices shall be installed in accordance with the requirements of the Utility in such locations as determined by the Utility.

(a) All devices, assemblies and mechanisms intended to protect potable water supplies relative to cross connection or backflow shall be of a type recognized and approved in accordance with Wisconsin Administrative Code Chapter Commerce 84 as adopted by the Ho-Chunk Nation.

(b) All residential backflow prevention devices shall be installed immediately after the meter.

(c) All non-residential backflow prevention devices shall be installed immediately after the meter and at any other location that could potentially be a cross-connection concern as determined by the Plumbing Code.

(d) The Department shall not allow any cross-connection to remain unless it is protected by an approved backflow prevention device for which a permit has been issued and which will be regularly tested to insure satisfactory operation.

(e) The Owner shall be responsible for the elimination or protection of all cross-connections on the premises.

(f) The Owner shall inform the Department of any proposed or modified cross-connections and also any existing cross-connections of which the Owner is aware, but has not been found by the Department.

(g) The Owner of a non-residential facility shall correct any malfunction of the backflow prevention device that is revealed by periodic testing.

(2) Water supply systems and the connection of each plumbing fixture, piece of equipment, appliance or non-potable water piping system shall be designed, installed and maintained in such a manner to prevent the contamination of water supplies by means of cross connections.

(3) Any existing backflow prevention device shall be allowed by the Department to continue in service unless the degree of hazard is such as to exceed the effectiveness of the present device or result in an unreasonable risk to the public health.

(4) Any change of use or remodeling of a facility will require the backflow prevention devices in the facility to be upgraded to meet the requirements of the new facility.

(5) All existing facilities will be inspected by the Department within six (6) months of the approval of this Ordinance and any changes required to meet the backflow prevention code must be completed within 30 days of the notification.

(6) The owner of a new facility shall provide the Department notification of the intent to connect to the community water system and provide an on-site evaluation and/or

inspection of the plans in order to determine the type of backflow prevention device that will be required.

(7) The owner of a new facility and/or the contractor responsible for the construction of the facility shall notify the Department of the construction schedule so that the Water Operator can inspect the type and installation of the backflow prevention devices being installed.

c. Testing.

(1) All residential backflow prevention devices shall be tested as needed by the Department and all repairs and replacements shall be the responsibility of the Department.

(2) All non-residential backflow prevention devices shall be tested annually. If the device is in a water system that is under State of Wisconsin jurisdiction, the frequency shall be based on Wisconsin Codes. This testing will be done at the owner's expense. All test results shall be forwarded to the Water Utility.

(3) Any non-residential backflow prevention device that fails during a periodic test will be repaired or replaced at the owner's expense. Upon completion of the repair, the device will be re-tested at the owner's expense to insure correct operation.

(a) High hazard situations will not be allowed to continue unprotected if the backflow prevention device fails the test and cannot be repaired immediately. Parallel installation of two (2) devices is a recommended means of the owner insuring that uninterrupted water service is maintained.

(b) In low hazard situations the compliance must be attained within 30 days after the test date.

(4) Repeated failures in the same location will require that the testing be done more frequently if the Water Operator determines that there is an increased risk for contamination. The Water Operator will determine the new test requirements. This increased testing will be done at the owner's expense.

(5) Only individuals and companies approved by the Department and/or the Wisconsin Department of Commerce shall be qualified to perform such testing. This certification shall accompany the results of the testing.

**15. Inspections and Meter Reading.** Authorized meter readers shall have free access at reasonable hours of the day to all parts of every building and premises connected with the Nation's water supply system in order to read meters and make inspections.

**16. Other Rules and Regulations.**

a. Vacating of Premises and Discontinuance of Service. Whenever premises served by the Department are vacated, or whenever any person desires to discontinue utility services, the Department must be notified in writing. The owner or occupant of the premises shall be liable for any damages to the utility(s) by reason of failure to notify the Department of the discontinuation of utility service(s).

b. Property Rights. The private property of each user shall not be subject to utility debts in any amount or to any extent whatever, except the amount of money held for deposit for such utility service, and except for per capita payments to the extent authorized by the Nation's *Per Capita Distribution Ordinance* (2 HCC § 12). Debts owed under this Ordinance are deemed debts to the Nation.

**17. Prohibited Activities.**

a. No person other than authorized personnel from the Department are allowed to operate curb stops.

b. No user shall allow others to connect to the water distribution system through his lateral or other plumbing connections on his premises.

**18. Liability for Minors.** Parents are as responsible for the acts of their minor children as if the parents committed the acts themselves

**CHAPTER III**  
**FLUORIDATION**

**19. System Design Requirements.**

a. General. The following equipment design requirements shall apply to all new community drinking water systems that will have additional Fluoride added to the water. Paragraphs (1) and (2), below, must be incorporated within 60 days of approval of this Ordinance on all current community drinking water systems adding Fluoride to the drinking water.

(1) The fluoride chemical pump must be installed so that it cannot operate unless water is being pumped into the system past the injector.

(2) It must be made physically impossible to plug the fluoride-metering pump into any standard continuously energized (hot) electrical outlet. The fluoride metering pump, the flow switch, and the water pump control circuit must be connected in series along with a parallel circuit containing an adjustable timer and holding circuit with both of the later two items connected in series with each other. It is the intent of this description to have the twist lock design electrical outlet into which the fluoride-metering pump is plugged and energized only when there is flow from the water pump. If two water pumps are normally pumping together when water production is requested, each



water pump shall have a flow switch and both flow switches shall have to be closed before the outlet that energizes the fluoride-metering pump is energized.

(3) All the water to be treated must pass the fluoride injection point.

(4) The fluoride injection point in a water line should be located in the lower one-third of the pipe, and the end of the injection line should extend into the pipe approximately one third of the pipe's diameter.

(5) A corporation style stop valve shall be connected into the water production pipe at the fluoride injection point. A stainless steel safety chain or cable shall be installed connecting the injector assembly to the corporation stop to protect the water plant operator and water plant from a possible blowout of the injector assembly.

(6) Two diaphragm-type, antisiphon devices shall be installed in the discharge line coming from the fluoride-metering pump. The antisiphon device should have a diaphragm that is spring-loaded in the closed position. These devices should be located at the fluoride injection point and at the metering pump head on the discharge side.

(7) The fluoride metering pump should be located on a shelf not more than 4 feet (1.2 m) higher than the lowest normal level of liquid in the solution container.

(8) For safety, fluoride-metering pumps should be sized to feed not more than 1.0 mg/L fluoride in the water near the stroke and speed settings that are equal to 50% of the metering pump total capacity (49% of capacity of an electronic chemical pump is achieved at speed and stroke settings of 70).

(9) The priming switch on the metering pump should be spring-loaded to prevent the pump from being started erroneously with the switch in the priming position.

(10) No customer shall be allowed to connect to the finished water line within 100 feet (30.5 m) of the fluoride injection point without the installation of an in-line mixer, small mixing tank or storage tank within that 100 feet.

(11) A master meter must be on the main water service line so that calculations can be made to confirm that the proper amounts of fluoride solution are being fed.

(12) The fluoride feed lines must be clearly identified by some means and the direction of flow indicated on the lines. If a color code is used, it should be light blue with red bands.

(13) All hose connections within reach of the fluoride feed equipment should be provided with a hose bib vacuum breaker.

(14) All fluoride chemicals must conform to the appropriate American Water Works Association (AWWA) standards (B-701). It is recommended that a one year

supply of fluoride chemical be maintained to minimize the effect of a possible fluoride chemical shortage.

(15) Cross-connection controls that conform to this Ordinance must be provided.

b. Injection Systems. The following injection systems are approved for installation in Ho-Chunk Nation community water systems.

(1) Sodium Fluoride Saturator System.

(a) When using this system, the installation shall be installed using the guidelines developed by the CDC as referenced in paragraph 4d.

(b) Unsaturated (batch-mixed) sodium fluoride solution shall not be used in water fluoridation. Soften water used in the saturator to less than 4 grains hardness.

(c) Only granular sodium fluoride should be used in saturators for operator safety and to prevent plugging the saturators.

(2) Fluorosilicic Acid Systems.

(a) When using this system, the installation shall be installed using the guidelines developed by the CDC as referenced in paragraph 4d.

(b) The fluorosilicic acid (hydrofluosilicic acid) used in this system must not be diluted to reduce the hazard to the water plant operator.

(c) No more than a 7-day supply of fluorosilicic acid shall be connected at any time to the suction side of the chemical feed pump.

(d) Acid supply tanks to the feed pumps must be located on scales.

(e) Any bulk storage tanks for acid must be in accordance with Ho-Chunk, Federal and/or state law.

## **20. Testing Requirements.**

a. Equipment.

(1) All testing shall be done using an ion electrode method for fluoride analysis.

(2) A magnetic stirrer shall be used in conjunction with the ion electrode method.

(3) The colorimetric method (SPADNS) of fluoride analysis shall not be used for any required testing.

b. Frequency.

(1) Water system personnel must monitor fluoride levels in each water distribution system at least five (5) days per week. On systems that are inspected daily, the fluoride levels must be inspected daily. Samples that will reflect the actual level of fluoride in the water system should be taken at points throughout the water system.

(2) A testing plan shall be developed for each system so that each portion of the system is tested within 30 days.

c. Split Sampling.

(1) At least once each quarter, a sample from each water distribution system where fluoride is injected shall be divided with one portion analyzed for fluoride by water system personnel and the other portion analyzed by an EPA approved laboratory. The results of the split sample should be within 20% of the value of the EPA approved laboratory. Variations beyond this should be investigated for consistency with previous deviations, condition of electrode, quality of mixing, and method of sampling.

d. Calculated Dosage. Water system personnel must calculate the fluoride levels in each water distribution system at least five (5) days per week. On systems that are inspected daily, the fluoride levels must be calculated daily. This is done using the weight of fluoride injected compared to the volume of water pumped since the last measurement.

$$\text{Calculated Dosage (mg/L)} = \frac{\text{fluoride fed (lbs)} \times \text{AFI} \times \text{chemical purity}}{\text{Actual production (MG)} \times 8.34 \text{ lbs/gal}}$$

(Where AFI is the Available Fluoride Ion Concentration)

e. Acceptable Range of Fluoride Levels. The optimal range for fluoride levels in the Ho-Chunk Community Water Systems is 1.1 ppm to 1.5 ppm. When a test result is at or near the top end of the analyzer scale, the water sample must be diluted and retested to ensure that high fluoride levels are accurately measured. Immediate action must be taken if the fluoride level exceeds this range. Table 1 indicates the required action for any overfeeds. Table 2 provides the recommended optimal fluoride levels based on the annual average of maximum daily air temperatures.

f. Source Water Testing. The source water from each well located in a community water system injecting fluoride shall be tested on an annual basis with the sample to be taken before the injection point. The testing shall be completed by an EPA approved laboratory. This value shall be used to adjust the dosage of fluoride added to the system.

**21. Reporting.**

a. The operator shall keep a daily logbook at each system injecting fluoride of all fluoride test results noting the date, test results and location in the system. The logbook

shall include the date, place, time of sampling and the name of the person who collected the sample.

b. The operator shall keep a daily logbook at each system injecting fluoride of all calculated test results including the amount of fluoride used, make-up water used, and the pumping records. The logbook shall include the date, place, time of sampling and the name of the person who collected the sample.

c. The operator shall record the split sample results on a quarterly basis and maintain a file of test results and comparisons.

d. A summary of all fluoride test results including split sample test results shall be done on a monthly basis and submitted to the Office of Environmental Health and the Executive Director, Department of Housing.

e. Any community water system that is under the jurisdiction of the State of Wisconsin must submit reports as required by the State.

f. The summary of all fluoride test results should be made available to other Ho-Chunk departments if requested.

g. The test record file shall be maintained for a period of not less than two years.

## **22. System Maintenance.**

a. Operation and Maintenance schedules (O&M) must be established to maintain the equipment. See Table 3 for recommended maintenance.

b. Fluoride feed equipment, controls, safety equipment and plan, storage area, testing equipment, accessory equipment, and other appurtenances must be inspected annually.

c. All antisiphon devices must be dismantled and visually inspected at least once a year.

## **23. Safety Procedures.**

a. The use of personal protective equipment (PPE) is required when fluoride compounds are handled or when maintenance on fluoridation equipment is performed. See Personal Protective Equipment, Occupational Safety and Health Program Act (6 HCC § 8-7).

b. An on-site emergency plan must be established and maintained for each water system injecting fluoride and should be based on the type of fluoride used. This plan must include public notification procedures based on Table 1.

c. Fluorosilicic Acid System.

(1) The operator shall wear the following PPE:

- (a) Gauntlet neoprene gloves with cuffs, which should be a minimum length of 12 inches (30.5 cm);
- (b) Full face shield and splash-proof safety goggles; and
- (c) Heavy-duty, acid-proof neoprene apron or acid-proof clothing and shoes.

(2) A safety shower and an eye wash station utilizing tempered water must be available and easily accessible. The existing pumphouse in Mission Village is exempt from this requirement until a new pumphouse can be constructed that replaces this pumphouse. All current pumphouses are exempt from the tempered water requirement, but must have the safety shower and eye wash station.

d. Sodium Fluoride System (Saturator System).

(1) The operator shall wear the following PPE:

- (a) A National Institute for Occupational Safety and Health (NIOSH)/Mine Safety and Health Administration (MSHA) approved, N-series particulate respirator (i.e. chemical mask) with a soft rubber face-to-mask seal and replaceable cartridges.
- (b) Splash-proof safety goggles;
- (c) Gauntlet neoprene gloves with cuffs, which should be a minimum length of 12 inches (30.5 cm); and
- (d) Heavy-duty, acid-proof neoprene apron.

(2) A safety shower and an eye wash station utilizing tempered water is an option for pumphouses using this method of fluoride mixing. The use of other chemicals in the pumphouse may change this requirement.

Table 1. Recommended Fluoride Overfeed Actions for Community Water Systems  
 Source: U.S. Department of Health, Centers for Disease Control, Engineering and Administrative Recommendations for Water Fluoridation, 1995.

Fluoride Level	Actions Recommended
0.1 mg/L above control range to 2.0 mg/L	1. Leave the fluoridation system on. 2. Determine malfunction and repair.
2.1 mg/L to 4.0 mg/L	1. Leave the fluoridation system on. 2. Determine malfunction and repair. 3. Notify supervisor and report the incident to the Office of Environmental Health.
4.1 mg/L to 10.0 mg/L	1. Determine malfunction and immediately attempt to repair.

	<ol style="list-style-type: none"> <li>2. If the problem is not found and corrected quickly (within 1 hour), turn off the fluoridation system. Notify supervisor and report the incident to the Office of Environmental Health.</li> <li>3. Take water samples at several points in the distribution system and test the fluoride content.</li> <li>4. Retest if results are still high.</li> <li>5. Determine malfunction and repair. Then, with the supervisor's permission, restart the fluoridation system.</li> </ol>
10.1 mg/L or Greater	<ol style="list-style-type: none"> <li>1. Turn off the fluoridation system immediately.</li> <li>2. Notify supervisor and report the incident to the Office of Environmental Health and follow their instructions.</li> <li>3. Take water samples at several points in the distribution system and test the fluoride content. Retest if results are still high. Save part of each sample for an EPA approved laboratory to test.</li> <li>4. Determine malfunction and repair. Then, with the supervisor and Office of Environmental Health's permission, restart the fluoridation system.</li> </ol>

**Table 2: Recommended Optimal Fluoride Levels for Community Public Water Supply Systems**

Source: U.S. Department of Health, Centers for Disease Control, Engineering and Administrative Recommendations for Water Fluoridation, 1995.

Annual average of maximum daily air temperatures		Recommended Fluoride Concentrations (mg/L)	Recommended control range (mg/L) 0.1-0.5	
F	C		Subtract 0.1	Add 0.5
50.0-53.7	10.0-12.0	1.2	1.1	1.7
53.8-58.3	12.1-14.6	1.1	1.0	1.6
58.4-63.8	14.7-17.7	1.0	0.9	1.5
63.9-70.6	17.8-21.4	0.9	0.8	1.4
70.7-79.2	21.5-26.2	0.8	0.7	1.3
79.3-90.5	26.3-32.5	0.7	0.6	1.2

**Table 3: Recommended Maintenance Plan**

Source: U.S. Department of Health, Centers for Disease Control, Water Fluoridation: A Manual for Water Plant Operators, April 1994, p.88.

Equipment	Maintenance Work	Time
Metering Pump	1. Disassemble pump and replace worn parts.	1. Once a year
	2. Change gear oil (except electronic). Keep spare parts on hand for liquid ends.	2. After first 2 to 4 weeks, then every 6 months.
Saturator	1. Drain, disassemble, and clean. Remove and reuse saturated sodium fluoride	1. Annually (or more often with heavy use)
	2. Disassemble and clean precipitates from foot valve or suction strainer, discharge and injection lines, injection nozzle.	2. Every 6 months. Do more often if plugging becomes a problem.

	3. Disassemble and replace worn parts of the siphon breaker	3. Every 6 months
Dry Feeders	1. Thoroughly clean	1. Annually
	2. Check for worn gears, parts, etc.	2. Annually
	3. Lubricate and change gear oil	3. Annually
Anti-Siphon	1. Disassemble and replace worn parts.	1. Annually
Injection Nozzle	1. Disassemble and clean	1. Annually

**CHAPTER IV**  
**CUSTOMER RELATIONS AND ENFORCEMENT**

**24. Payment of Bills.**

a. Reasonable care will be exercised in the proper delivery of utility bills. Failure to receive a utility bill, however, shall not relieve any person of the responsibility for payment of rates within the prescribed period, nor exempt any person from any penalty imposed for delinquency in the payment thereof.

b. Billing. The property owner or occupant shall be held responsible for all utility bills on premises that s/he owns or occupies. All utility bills and notices of any nature relative to the utility services will be addressed to the owner or occupant and mailed or delivered to the premises referred to on such bill or notice each month. Such bills shall be due and payable to the Department before the end of the month in which the bill is rendered.

c. Default on Utility Bill. If a customer defaults on payment for utility services, the Department may:

(1) Impose a delinquency charge.

(2) Terminate utility service, no earlier than 15 days after notice is given to the customer by the Department.

(3) Take any other action necessary to collect such payments. Any amount of money due and owing for payment of utility services found to be in default of the user's obligation to make timely payment for such services, as well as any reasonable costs associated with the collection of the amount in default, shall be considered a debt to the Ho-Chunk Nation.

d. Discontinuation of Services. When utility services have been discontinued due to default, the Department may restore said utility services at its discretion. The Department shall establish rates for any such reconnection.

**25. Customer Complaints and Requests.**

a. All complaints regarding decisions made by the Department shall be filed in writing with the Executive Director of Housing requesting full review by the Department of Housing Board of Directors.

- b. All requests for repairs or connections shall be made directly to the Department.

**26. Enforcement.**

a. The Department is hereby authorized to issue a citation for violation of this Ordinance to either the owner or occupant of the premises. The citation shall specifically state the violation and penalty. Any citation so issued is to be referred to the Ho-Chunk Nation Department of Justice for prosecution.

b. Any fines imposed as penalties, and any costs associated with such prosecutions, may be collected by any means available in law. The Court may also issue other orders deemed necessary to abate the problem giving rise to the violation. Failure to comply with any other order of the Trial Court may be punishable as contempt.

**27. Penalties.** The following penalties may be assessed singly or in combination:

a. A person who violates any provision of this Ordinance shall forfeit not less than \$25.00.

b. A person who repeatedly violates provisions of this Ordinance may be ordered to post a bond of at least \$50.00 against future violations.

c. Any or all utility services provided by the Nation, including water, sewer, or other service may be terminated for a violation of any provision of this Ordinance or for a failure to pay any forfeiture assessed for any violation.

d. A person who violates any provision of this Ordinance may be required to do community service work.

e. Restrictive conditions may be placed on future utility service.

**28. Records.** The Department will initiate and maintain the following:

a. Master files on cross connections and cross-connection devices installed in facilities connected to the community water systems.

b. Copies of all permits issued by the State of Wisconsin for facilities connected to the community water systems.

c. Master files on customer cross-connection tests and/or inspections conducted by the Department or as required by the State of Wisconsin.

**29. Reports.**



a. Annual Report. The Department shall submit a detailed annual report, signed and presented by the Executive Director of Housing to the Ho-Chunk Nation Legislature disclosing:

- (1) Number of services provided, by name and class of service.
- (2) Number of new services, by name and class of service.
- (3) Number of terminated services by class of service and reason for termination.
- (4) Status of construction, repairs, operation and maintenance of all systems and services.
- (5) Status of any contracts and agreements.
- (6) Any such other information as the Department shall deem pertinent.

b. The Department Water Operator will submit the following reports to the Department of Housing Board of Directors.

- (1) Initial listing of low hazard cross-connections.
- (2) Initial listing of high hazard cross-connections.
- (3) An annual update of all low hazard cross-connections installed in the non-residential facilities connected to the community water systems.
- (4) An annual update of high hazard cross-connections installed in the non-residential facilities connected to the community water systems.

c. The Department Water Operator will submit the following reports to the State of Wisconsin.

d. An annual summary of the Cross-connections in community water systems regulated by the State of Wisconsin will also follow the requirements of Wisconsin.

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Legislative History:

11/30/98	Utilities Ordinance enacted by Legislative Resolution 11/03/98/98D.
11/24/04	Utilities Ordinance reformatted IAW Legislative Resolution 11/16/04A as a Proposed Bill (8 HCC § 2) and submitted to the Office of the President for Executive Review and Coordination.
3/21/05	Department of Health and Social Services submits draft Water Utility Ordinance.
7/6/05	Department of Health and Social Services submits draft chapter of fluoridation.
8/4/05	Administration Committee reviews Draft Bill Water Utility Ordinance (3 HCC § 7).
9/6/05	Legislature places Draft Bill out for 45-Day Public Review.
10/29/05	45-Day Public Review periods ends.
12/7/05	Enacted as Water Utility Ordinance (3 HCC § 7) by Legislative Resolution 12/7/05B.