ORDINANCE NO: _____
OF THE BOARD OF ALDERMEN
COLE CAMP, MISSOURI

Bill Number 2026-06

AN ORDINANCE AMENDING ARTICLE IV
CROSS CONNECTION CONTROL

AN ORDINANCE OF THE CITY OF CITY OF COLE CAMP, MISSOURI, REVISING THE ESTABLISHMENT OF A CROSS-CONNECTION CONTROL PROGRAM, REQUIRING BACKFLOW PREVENTION ASSEMBLIES,

WHEREAS, pursuant to Missouri Code of State Regulations 10 CSR 60-11.010 Prevention of Backflow, the City requires backflow protection for all public potable water systems to prevent contamination; and

WHEREAS, the Missouri Department of Natural Resources (MODNR) requires compliance with the approved backflow prevention assemblies list and tester certification requirements; and

NOW THEREFORE, be it ordained by the Council of the City of Cole Camp, Missouri, as follows:

> **Section 1. Adoption of revisions to the establishment of a cross-connection control program and backflow prevention.**

The City of Cole Camp, Missouri, hereby establishes a Cross-Connection Control Program to protect the City's public potable water supply from contamination or pollution resulting from actual or potential cross-connections and backflow. The provisions of this Section shall amend and replace Article 705, Sections 705.230 through 705.265, of the Code of Ordinances of the City of Cole Camp, Missouri, which shall read as follows:

Section 705.230 General Policy.

A. **Purpose.** The purpose of this [Subsection] **Article** is:

1. To protect the public potable water supply from contamination or pollution by containing within the consumer's internal distribution system or private water system contaminants or pollutants which could backflow through the service connection into the public potable water supply system.

2. To promote the elimination, containment, isolation, or control of existing [cross-connections,] **cross connections,** actual or potential, between the public or consumer's potable water [systems] **system** and non-potable water [systems,] **system,** plumbing [fixtures] **fixtures,** and [industrial process] **industrial-process** systems.

3. To provide for **the** maintenance of [a] continuing program of [cross-connection] **cross connection** control which will systematically and effectively prevent the contamination or pollution of all potable water systems.

B. **Application.** This [Chapter] **Article** shall apply to all premises served by the public potable water system of the [City.] **City of Cole Camp.**

C. **Policy. This Article will be reasonably interpreted by the Superintendent.** It is the [City] Superintendent's [responsibility] **intent** to recognize the varying degrees of hazard and to apply the principle that the degree of protection shall be commensurate with the degree of hazard.

D. The [City] Superintendent [is] **shall be** primarily responsible for protection of the public potable water distribution system from contamination or pollution due to backflow of contaminants or pollutants through the water service connection. The cooperation of all consumers is required to implement and maintain the program to control [cross-connections.] **cross connections.** The **Superintendent and** consumer [is] **are jointly** responsible for preventing contamination of the water [system within the consumer's premises.] **system.**

E. If, in the judgement of the Superintendent or his authorized representative, [cross-connection] **cross connection** protection is required through either [pipe] **piping** modification or installation of an approved backflow prevention [device,] **assembly,** due notice shall be given to the consumer. The consumer shall immediately comply by providing the required protection at his own expense; **and** failure, refusal, or inability on the part of the consumer to provide such protection shall constitute grounds for discontinuing water service to the premises until such protection has been provided.

F. Definitions. The definitions listed in Appendix A shall apply in the interpretation and enforcement of this Article.

Section 705.240 Cross-Connections Prohibited.

A. No water service connection shall be installed or maintained to any premises where actual or potential [cross-connections] **cross connections** to the public potable or consumer's water system may exist unless such actual or potential [cross-connections] **cross connections** are abated or controlled to the satisfaction of the Superintendent, and as required by the laws and regulations of the Missouri Department of Natural [Resources.] **Resources (10 CSR 60-Chapter 11 Backflow Prevention).**

B. No connection shall be installed or maintained whereby an auxiliary water supply may enter a public potable or consumer's water system unless such auxiliary water supply and the method of connection and use of such supply shall have been approved by the Superintendent and the Missouri Department of Natural Resources.

C. No water service connection shall be installed or maintained to any premises in which the plumbing system, facilities, and fixtures have not been constructed and installed using acceptable plumbing practices considered by the Superintendent as necessary for the protection of health and safety.

Section 705.250 Survey and Investigation.

A. The consumer's premises shall be open at all reasonable times to the Superintendent, or his authorized representative, for the [conduct] **conduction** of surveys and investigations of water use practices within the consumer's premises to determine whether there are actual or potential [cross-connections] **cross connections** to the [consumer] **consumer's** water system through which contaminants or pollutants could backflow into the public potable water system.

B. On request by the Superintendent or his authorized representative, the consumer shall furnish information on water use practices within his premises.

C. It shall be the responsibility of the water consumer to conduct periodic surveys of water use practices on his premises to determine whether there are actual or potential [cross-connections] **cross connections** to his water system through which contaminants or pollutants could backflow into his or the public potable water system.

Section 705.260 Protection.

A. The type of protection required by this [Chapter] **Article** shall depend on the degree of hazard which exists, as follows:

1. An approved [air-gap] **air gap** separation shall be installed where the public potable water system may be contaminated with substances that could cause a severe health hazard.

2. An approved [air-gap] **air gap** separation or an approved reduced pressure principle backflow prevention [device] **assembly** shall be installed where the public potable water system may be contaminated with a substance that could cause a system or health hazard.

3. An approved [air-gap] **air gap** separation or an approved reduced pressure principle backflow prevention [device] **assembly** or an approved [double-check] **double check** valve assembly shall be installed where the public potable water system may be polluted with substances that could cause a [pollutional] **pollution** hazard not dangerous to health.

B. An approved backflow prevention [device] **assembly** shall be installed on each service line to a consumer's water system serving premises where, in the [judgment] **judgement** of the Superintendent or the Missouri Department of Natural Resources, actual or potential hazards to the public potable water system exist. The type and degree of protection required shall be commensurate with the degree of hazard.

C. An approved [air-gap] **air gap** separation or reduced pressure principle backflow prevention [device] **assembly** shall be installed at the service connection or within any premises where, in the [judgment] **judgement** of the Superintendent or the Missouri Department of Natural Resources, the nature and extent of [the] activities on the [premises] **premises,** or the materials used in connection with the activities, or [materials] **material** stored on the [premises] **premises,** would present an immediate and dangerous hazard to health should a [cross-] **cross** connection occur, even though such [cross-connection] **cross connection** may not exist at the time the backflow prevention [device] **assembly** is required to be installed. This [includes,] **includes** but is not [limited to,] **limit to** the following situations:

1. Premises having an auxiliary water supply, unless the quality of the auxiliary supply is acceptable to the Superintendent and the Missouri Department of Natural Resources.

2. Premises having internal [cross-connections] **cross connections** that are not correctable, or intricate plumbing arrangements which make it impractical to ascertain whether [cross-connections] **or not cross connections** exist.

3. Premises where entry is restricted so that [inspections] **inspection** for [cross-connections] **cross connections** cannot be made with sufficient frequency or at sufficiently short notice to assure [that cross-connections] **the cross connections** do not exist.

4. Premises having a repeated history of [cross-connections] **cross connections** being established or [re-established.] **reestablished.**

5. Premises, which due to the nature of the enterprise therein, are subject to recurring modification or expansion.

6. Premises on which any substance is handled under pressure so as to permit entry into the **public** water supply, or where a [cross-connection] **cross connection** could reasonably be expected to occur. This shall include the handling of process waters and cooling waters.

7. Premises where materials of a toxic or hazardous nature are handled such that if [a] backsiphonage or backpressure should occur, a serious health hazard may result.

D. The [following] types of facilities **listed in Appendix B** fall into one [(1)] or more of the categories of premises where an [improved air-gap] **approved air gap** separation or reduced pressure principle backflow prevention [device] **assembly** is required by the Superintendent and the Missouri Department of Natural Resources to protect the public water supply and must be installed at these facilities unless all hazardous or potentially hazardous conditions have been eliminated or corrected by other methods to the satisfaction of the Superintendent and the Missouri Department of Natural [Resources:] **Resources.**

[1. Aircraft and missile plants.]

[2. Automotive plants.]

[3. Auxiliary water systems.]

[4. Beverage bottling plants.]

[5. Breweries.]

[6. Building complexes.]

[7. Canneries, packing houses and production houses.]

[8. Car washing facilities.]

[9. Chemical manufacturing, processing, compounding or treatment plants.]

[10. Chemically contained water systems.]

[11. Civil works.]

[12. Dairies and cold storage plants.]

[13. Film laboratories.]

[14. Fire protection systems.]

[15. Hazardous waste storage and disposal sites.]

[16. Hospitals, mortuaries, clinics.]

[17. Irrigation and sprinkler systems.]

[18. Laundries and dye works.]

[19. Metal manufacturing, cleaning, processing and fabricating plants.]

[20. Oil and gas production, storage and transmission properties.]

[21. Paper and paper products plants.]

[22. Plating plants.]

[23. Power plants.]

[24. Printing and publishing facilities.]

[25. Radioactive material processing plants and nuclear reactors.]

[26. Research and analytical laboratories.]

[27. Rubber plants, natural and synthetic.]

[28. Sand and gravel plants.]

[29. Schools and colleges.]

[30. Sewage and storm drainage facilities — pumping stations.]

[31. Waterfront facilities and industries.]

[32. Zoological and horticultural gardens.]

E. The type of facility listed in Appendix C are premises where an approved double check valve assembly is required by the Superintendent and the Missouri Department of Natural Resources as the minimum level of protection for the public water supply and must be installed at these facilities unless all hazardous or potentially hazardous conditions have been eliminated or corrected by other methods to the satisfaction of the Superintendent and the Missouri Department of Natural Resources.

F. Customer facilities not listed in Appendix B or C may be designated a backflow hazard by written notification from the Superintendent. The notice shall specify the nature of the customer activity that necessitates designation of the facility as a backflow hazard, the type of backflow protection required and the date by which the customer shall install or construct the required assembly.

Section 705.265 Backflow Prevention.

A. Any backflow prevention [device] **assembly** required [by this Chapter] **to protect the facilities listed in Appendix B and C** shall be of a model or construction approved by the Superintendent and the Missouri Department of Natural Resources.

1. [Air-gap] **Air gap** separation to be approved shall be at least twice the diameter of the supply [pipe] **pipe,** measured vertically above the top rim of the **receiving** vessel, but in no case less than one [(1)] inch.

2. [The only acceptable backflow prevention assemblies, meeting the requirement of 10 CSR60-11.010, are those models of double-check] **A double check** valve [assemblies and reduce] **assembly for Class II hazards or a reduced** pressure principle backflow prevention [assemblies which are] **assembly for Class I hazards shall be** approved by the [Foundation for Cross Control] **Superintendent,** and [Hydraulic Research of the University of Southern California and are] **shall appear** on the **current list of** approved [list] **backflow prevention assemblies** maintained by the Missouri Department of Natural [Resources.] **Resources (Double Check Valve Assemblies and Reduces Pressure Backflow Prevention Assemblies approved by the University of Southern California's Foundation for Cross Connection Control and Hydraulic Research).**

[B. Existing backflow prevention devices approved by the Superintendent at the time of installation and properly maintained shall, except for inspection and maintenance requirements, be excluded from the requirements of this Chapter so long as the Superintendent is assured they will satisfactorily protect the water system. Whenever the existing device is moved from its present location, or requires more than minimum maintenance, or when the Superintendent finds maintenance constitutes a hazard to health, the unit shall be replaced by a backflow prevention device meeting the requirements of this Chapter.]

C. Installation.

1. Backflow prevention [devices] **assemblies** required by this [Chapter] **Article** shall be installed at a location and in a manner approved by the Superintendent and shall be installed at the expense of the water consumer.

[2. Backflow prevention devices installed on the service line to the consumer's water system shall be located on the consumer's side of the water meter, as close to the meter as is reasonably practical, and prior to any other connection.]

[3. Backflow prevention devices shall be located so as to be readily accessible for maintenance and testing, protected from freezing, and where no part of the device will be submerged or subject to flooding by any fluid.]

2. Backflow prevention assemblies shall be installed and in an orientation as specified by the manufacturer. The Department of Natural Resources maintains a list of approved backflow prevention assemblies and the orientation allowed for each assembly.

3. Modification to an assembly using spare parts other than those of the original manufacturer invalidates the approval of the device.

4. No bypass piping shall be allowed around a backflow prevention assembly unless the bypass is equipped with the same degree of backflow prevention protection and is tested annually.

5. Backflow prevention assemblies installed on the service line to a customer's water system shall be located so as to be readily accessible for maintenance and testing and protected from freezing. No reduced pressure principle backflow prevention assembly shall be located where it will be submerged or subject to flooding by any fluid.

6. No plug or additional piping shall be affixed to the pressure differential relief port valve (except for specifically-designed funnel apparatus available from the manufacturer). The pressure differential relief port must be a minimum of twelve (12) inches above the floor level.

D. [Inspection And Maintenance.] **Testing of Backflow Prevention Assemblies.**

1. It shall be the duty of the consumer at any premises on which backflow prevention [devices] **assemblies** required by this [Chapter] **Article** are installed to have inspections, tests, and overhauls [made] **make** in accordance with the following schedule or more often where [inspections] **test results** indicate a [need.] **need. The Superintendent may establish the annual test date based on the nature of the customer's water use requirements.**

a. [Air-gap] **Air gap** separations shall be inspected at the time of installation and at least every twelve [(12)] months thereafter.

b. [Double-check] **Double check** valve assemblies shall be inspected and tested for [tightness] **proper operation** at the time of installation and at least every twelve [(12)] months [thereafter. They shall be dismantled, inspected internally, cleaned and repaired whenever needed and at least every thirty (30) months.] **thereafter.**

c. Reduced pressure principle backflow prevention [devices] **assemblies** shall be inspected and tested for [tightness] **proper operation** at the time of installation and at least every twelve [(12)] months [thereafter. They shall be dismantled and inspected internally, cleaned and repaired as needed and at least every five (5) years.] **thereafter.**

2. Inspections, tests, and overhauls of backflow prevention [devices] **assemblies** shall be made at the expense of the water consumer and shall be performed by [the Superintendent or] a State of Missouri certified backflow prevention [device] **assembly** tester.

3. Whenever backflow prevention [devices] **assemblies** required by this [Chapter] **Article** are found to be defective, they shall be repaired or replaced at the expense of the consumer without delay.

4. The water consumer must maintain a complete record of each backflow prevention [device] **assembly** from purchase to retirement. This shall include a comprehensive listing that includes a record of all tests, inspections, and repairs. Records of [inspections,] **inspection,** tests, [repairs] **repairs,** and overhauls shall be made available to the Superintendent upon request.

5. Backflow prevention [devices] **assemblies** shall not be bypassed, made inoperative, [removed] **removed,** or otherwise made [ineffective without specific authorization by the Superintendent.] **ineffective.**

6. Modification to an assembly using spare parts other than those of the original manufacturer invalidates the approval of the device.

E. Violations.

1. The Superintendent shall deny or discontinue, after reasonable notice to the occupants thereof, the water service to any premises wherein any backflow prevention [device] **assembly** required by this [Chapter] **Article** is not installed, [tested] **tested,** and maintained in a manner acceptable to the Superintendent, or if it is found that the backflow prevention [device] **assembly** has been removed or bypassed, or if an unprotected [cross-connection] **cross connection** exists on the premises.

2. Water service to such premises shall not be restored until the consumer has corrected or eliminated such conditions or defects in [compliance] **conformance** with this [Chapter] **Article** to the satisfaction of the Superintendent.

Appendix A Definitions

1. "Air gap separation" means the unobstructed vertical distance through the free atmosphere between the lowest opening from any pipe or faucet supplying water to a tank, plumbing fixture, or other device and the overflow level rim of the receptacle, and shall be at least double the diameter of the supply pipe measured vertically above the flood level rim of the vessel, but in no case less than one inch.

2. "Auxiliary water supply" means any water source or system, other than the public water supply, that may be available in the building or premises.

3. "Backflow" means the flow other than the intended direction of flow, of any foreign liquids, gases, or substances into the distribution system of a public water supply.

4. "Backflow prevention assembly" means any double check valve or reduced pressure principle backflow preventer having resilient-seated shut-off valves on both the upstream and downstream end and the necessary test cocks as integral parts of the assembly.

5. "Consumer" means the owner or person in control of any premises supplied by or in any manner connected to a public water system.

6. "Containment" means protection of the public water supply by installing a backflow prevention assembly or air gap separation on the main service line to a facility.

7. "Contamination" means an impairment of the quality of the water by sewage, process fluids, or other wastes to a degree which could create an actual hazard to the public health through poisoning or through spread of disease by exposure.

8. "Cross connection" means any physical link between a potable water supply and any other substance, fluid, or source, which makes possible contamination of the potable water supply due to the reversal of flow of the water in the piping or distribution system.

9. "Hazard, Degree of" means an evaluation of the potential risk to public health and the adverse effect of the hazard upon the potable water system.

a. Hazard, Health - any condition, device, or practice in the water supply system and its operation which could create or may create a danger to the health and well-being of the water consumer.

b. Hazard, Plumbing - a plumbing type cross connection in a consumer's potable water system that has not been properly protected by a vacuum breaker, air gap separation or backflow prevention assembly.

c. Hazard, Pollutional - an actual or potential threat to the physical properties of the water system or to the potablility of the public or consumer's potable water system but which would constitute a nuisance or be aesthetically objectionable or could cause damage to the system or its appurtenances, but would not be dangerous to health.

d. Hazard, System - an actual or potential threat of severe damage to the physical properties of the public potable water system or the consumer's potable water system, or of a pollution or

contamination which would have a protracted effect on the quality of the potable water in the system.

10. "Isolation" means protection of a facility's internal plumbing system by installing a backflow prevention assembly, air gap separation, or other backflow prevention device on an individual fixture, appurtenance, or system.

11. "Pollution" means the presence of any foreign substance (organic, inorganic, or biological) in water which tends to degrade its quality so as to constitute a hazard or impair the usefulness of the water to a degree which does not create an actual hazard to the public health but which does adversely and unreasonably affect such waters for domestic use.

12. "Public potable water system" means any publicly or privately owned water system supplying water to the general public which is satisfactory for drinking, culinary, and domestic purposes and meets the requirements of the Missouri Department of Natural Resources.

13. "Service connection" means the terminal end of a service line from the public water system. If a meter is installed at the end of the service, then the service connection means the downstream end of the meter.

14. "Superintendent" means the owner, operator, or individual in responsible charge of a public water system.

Appendix B Types of Facilities Representing High Hazard Cross Connections

1. Aircraft and missile manufacturing plants;

2. Automotive plants including those plants which manufacture motorcycles, automobiles, trucks, recreational vehicles and construction and agricultural equipment;

3. Potable water dispensing stations which are served by a public water system;

4. Beverage bottling plants including dairies and breweries;

5. Canneries, packing houses and reduction plants;

6. Car washes;

7. Chemical, biological and radiological laboratories including those in high schools, trade schools, colleges, universities and research institutions;

8. Hospital, clinics, medical buildings, autopsy facilities, morgues, mortuaries, dental clinics, veterinary facilities and other medical facilities;

9. Metal or plastic manufacturing, fabrication, cleaning, plating or processing facilities;

10. Plants manufacturing paper and paper products;

11. Plants manufacturing, refining, compounding or processing fertilizer, film, herbicides, natural or synthetic rubber, pesticides, petroleum or petroleum products, pharmaceuticals, radiological materials or any chemical which would be a contaminant to the public water system;

12. Commercial facilities that use herbicides, pesticides, fertilizers or any chemical which would be a contaminant to the public water system;

13. Plants processing, blending or refining animal, vegetable or mineral oils;

14. Commercial laundries and dye works;

15. Sewage, storm water and industrial waste treatment plants and pumping stations;

16. Waterfront facilities including piers, docks, marinas and shipyards;

17. Industrial facilities which recycle water;

18. Restricted or classified facilities or other facilities closed to the supplier of water or the department;

19. Fire sprinkler systems using any chemical additives;

20. Auxiliary water systems;

21. Irrigation systems with facilities for injection of pesticides, herbicides or other chemicals or with provisions for creating back pressure;

22. Portable tanks for transporting water taken from a public water system; and

23. Facilities which have pumped or repressurized cooling or heating systems that are served by a public water system, including all boiler systems.

Appendix C Types of Facilities Representing Low Hazard Cross Connections

1. Tanks to store water from the public water system for fire fighting only, unless the tanks meet the requirements of the department for construction to maintain bacteriological quality of the water;

2. Fire sprinkler systems not using chemical additives. This only applies to new fire sprinkler systems or fire sprinkler systems scheduled for modifications;

3. Irrigation systems without facilities for injection of pesticides or other chemicals. The backflow prevention assembly may be installed between the customer service line and the irrigation system; and

4. Cross-connections what could permit introduction of contaminants into the public or customer water system and create a nuisance, be aesthetically objectionable, or cause minor damage to the water distribution system or its appurtenances.

Section 2: Amend Ordinance No: 373 of the City of Cole Camp, in conflict herewith, is revoked.

Section 3: This Ordinance shall be in full force and effect from and after its passage and approval.

READ THE FIRST TIME THIS _____ DAY OF NOVEMBER, 2026.
READ AND PASSED THIS _____ DAY OF _____, 2026.
AYES _____ NAYS _____ ABSENT/NOT VOTING _____

This ordinance is approved and passed the _____ day of _____ 2026.

_____

Nicole Garrett, Mayor

ATTEST:

_____

Dawn Paul, City Clerk