

1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
39
40
41
42
43
44
45
46

TOWN OF NEW CASTLE, COLORADO
ORDINANCE NO. E 2022-01

AN ORDINANCE OF THE TOWN OF NEW CASTLE WATER AND SEWER
ENTERPRISE AMENDING CHAPTERS 13.32 & 13.36 OF THE NEW CASTLE
MUNICIPAL CODE CONCERNING THE REGULATION OF
WASTERWATER DISCHARGE AND CROSS CONNECTIONS

WHEREAS, the Town of New Castle, Colorado (“Town”) is a home rule municipality with all of the powers, authorities, and privileges granted to it under its Charter and Colorado law; and

WHEREAS, pursuant to Chapter 13.04 the Town has established a Water and Sewer Enterprise (the “Enterprise”) as an enterprise of the Town within the meaning of Article X, Section 20 of the Colorado Constitution to manage, operate, use, maintain, and conduct all water, wastewater, and storm water activities, services, and facilities of the Town;

WHEREAS, pursuant to Section 13.04.050, the New Castle Town Council serves as the governing body of the Enterprise (the “Enterprise Board”); and

WHEREAS, Municipal Code (“Code”) Chapter 13.32 specifies the requirements for domestic and industrial discharge into the town’s wastewater treatment system;

WHEREAS, Code Chapter 13.36 specifies the requirements for cross connections with the town’s potable water supply;

WHEREAS, Chapter 13.32 has been insufficient for monitoring discharge and preventing instances of harmful effluents from entering the wastewater treatment system;

WHEREAS, Chapter 13.36 contains deficient specifications for regulating cross connections within the potable water supply;

WHEREAS, in order to help preserve safe and optimal performance of the Town’s potable water and wastewater systems, town staff recommends amending Chapter 13.32 and Chapter 13.36 with the revisions below;

WHEREAS, pursuant to the powers granted to the Enterprise under Section 13.04.060, the Enterprise Board now desires to amend the Code as provided in this ordinance.

NOW, THEREFORE, BE IT ORDAINED BY THE NEW CASTLE WATER AND SEWER ENTERPRISE AS FOLLOWS:

1. **Recitals.** The foregoing recitals are incorporated by reference herein as findings and determinations of the Enterprise Board.
2. **Chapter 13.32 Amendment.** Chapter 13.32 of the Code is repealed in its entirety and replaced by the following text:

1
2 **Chapter 13.32 – Sewage discharge regulations.**
3

4 The provisions contained in this chapter are set forth to prevent the discharge of any
5 waters which may interfere with the operation of the wastewater reclamation facilities or cause
6 damage to or pollution of the Town public wastewater system.

7 The size, slope, alignment and materials for construction of all public wastewater systems,
8 including building sewers, and the methods to be used in excavating, placing the pipe, jointing,
9 testing, backfilling the trench and connecting the building sewer into the public wastewater system,
10 shall conform to the requirements of this Code and all applicable ordinances, regulations and
11 specifications which may be adopted by the Town.

12
13 **13.32.010 – Definitions.**
14

15 “Domestic or Sanitary Wastes” means liquid, solid, and semi-solid wastes from the
16 noncommercial preparation, cooking, and handling of food and/or containing only human
17 excrement and similar matter from the sanitary conveyances of dwellings, commercial buildings,
18 industrial facilities, and institutions. Domestic users requiring interceptors or separators per the
19 plumbing code shall comply with section 13.32.030 below.
20

21 “Industrial Wastes” means the liquid, solid, and semi-solid wastes from industrial
22 manufacturing processes, trade, or businesses that do not include domestic or sanitary wastes
23 unless specifically regulated by applicable standards.
24

25 “Normal Domestic Strength Wastewater” means wastewater that when analyzed by
26 methods approved under 40 CFR Part 136 and contains no more than 250 mg/L of Total Suspended
27 Solids (TSS) and 250 mg/L of Biochemical Oxygen Demand (BOD₅).
28

29 "User" means any entity connected to the Town’s public wastewater facilities.
30

31 **13.32.020 – Nonacceptable discharge.**

- 32 A. No person shall discharge or cause to be discharged any storm water runoff, ground
33 water, roof runoff, subsurface drainage, cooling water or unpolluted industrial process
34 water into the public wastewater system. Storm water shall be discharged to such sewers
35 as are specifically designated as storm sewers or to a natural outlet approved by the town
36 administrator or designated representative.
37
- 38 B. No person shall discharge or cause to be discharged any of the following described water
39 or wastes into the Town’s public wastewater facilities:
40
- 41 1. Any solid, liquid or gas having a temperature higher than one hundred fifty (150)
42 degrees Fahrenheit.
43

- 1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
39
40
41
42
43
44
45
46
2. Any gasoline, benzene, naphtha, fuel oil, petroleum products or derivatives, mineral oil or other flammable or explosive liquid, solid or gas.
3. Any waters containing toxic or poisonous solids, liquids or gases in sufficient quantity, either singly or by interaction with other wastes, to injure or interfere with any wastewater reclamation process, equipment or employees, constitute a hazard to humans or animals, create a public nuisance or create any hazard in the receiving of waters to the public wastewater facilities.
4. Any waters or wastes containing fats, wax, *grease* or oils, whether emulsified or not, in excess of twenty-five (25) milligrams per liter or containing substances that will solidify or become discernibly viscous at temperatures between thirty-two (32) and one hundred fifty (150) degrees Fahrenheit.
5. Greywater and blackwater from recreational vehicles.
6. Any food waste that is not properly shredded.
7. Any waters or wastes having a pH lower than six (6.5) or greater than nine (9.0) or having any other corrosive property capable of causing damage or hazard to the public wastewater system, equipment or personnel, or that create any hazard in the receiving stream, including but not limited to cyanides in excess of twenty-five-hundredths (0.025) milligrams per liter as cyanides or in excess of one (1) milligram per liter of hydrogen sulfide in the wastewater discharged to the public wastewater system; provided, however, that these standards may be amended to conform to more restrictive state or federal regulations as may be adopted.
8. Solid or viscous substances in quantities or of size capable of causing obstruction to the flow in the public wastewater system or other interference with the proper operation of the wastewater reclamation facilities, such as but not limited to: ashes, bones, cinders, sand, mud, straw, shavings, metal, glass, rags, feathers, tar, plastics, wood, whole blood, cattle manure, hair, fleshings and entrails, beer or distillery slops, chemical residues, paint or ink residues, cannery wastes, tannery wastes, bulk solids or, either whole or ground by garbage grinders, paper dishes, cups or milk containers.
9. Any toxic substance, as the same is defined in the Rules and Regulations of the Environmental Protection Agency embodied in 40 C.F.R. § 266.505-266.506 and § 403, prohibiting the discharge of hazardous waste pharmaceuticals.
10. Any substance which would cause the Town's public wastewater facilities to violate any permit issued by the State, the federal government or any other applicable agency.
11. Any waters or wastes containing strong acid pickling wastes or concentrated plating solutions.

- 1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
39
40
41
42
43
44
45
12. Any waters or wastes containing iron, chromium, copper, zinc and similar objectionable or toxic substances to such degree that any such material received in the composite wastewater exceeds the limits established by the public works director in compliance with applicable state or federal regulations.
 13. Any radioactive wastes or isotopes of such half-life or concentrations as may exceed limits established by the public works director in compliance with applicable state or federal regulations.
 14. Any waters or wastes containing phenols or other waste- or odor-producing substances in such concentrations exceeding limits established by the public works director in compliance with regulations of state or federal agencies having jurisdiction over discharge to the receiving streams.
 15. Any waters, wastes, materials or substances which, either singularly or by interaction with other waters or wastes in the public wastewater system, release obnoxious or malodorous gases, form suspended solids in unusual concentration or create any other condition deleterious to structures and reclamation processes or which are capable of creating a public nuisance or hazard to public health.
 16. Materials which exert or cause:
 - a. Unusual concentrations of inert suspended solids (such as but not limited to Fuller's earth, lime slurries and lime residues) or of dissolved solids (such as but not limited to sodium chloride and sodium sulfate).
 - b. Excessive discoloration, such as but not limited to dye wastes and vegetable tanning solutions.
 - c. Biochemical Oxygen Demand (BOD₅) greater than domestic wastewater or having Suspended Solids (SS) greater than domestic wastewater, except that industrial wastes, as defined in Section 13-3-10 of this Article, may be discharged into the public wastewater system, provided that the person so discharging notifies the town administrator or designated representative in advance thereof and thereupon fully qualifies and complies with all the terms and provisions of this Chapter relating to industrial wastes; however, the person first must have received approval by action of the public works director to dump such wastes. Approval is revocable at any time by the director.
 - d. Volume of flow or concentration of wastes constituting a slug.
 17. Waters or wastes containing substances which are not amenable to treatment or reduction by the wastewater reclamation processes employed or are amenable to reclamation only to such degree that the wastewater treatment facility's effluent

1 cannot meet the requirements of other agencies having jurisdiction over discharge
2 to the receiving stream.

3 If any waters or wastes are discharged or are proposed to be discharged to the
4 public wastewater facilities, which waters contain the substances or possess the
5 characteristics enumerated in Subsections (A), (B) and (C) above, the town
6 administrator shall have available those remedies as are set forth in Section
7 13.32.040.

8 **13.32.030 – Interceptors and separators.**
9

10 Interceptors and separators shall be provided as necessary to prevent the discharge of oil,
11 grease, and other substances, including but not limited to those listed in Section 13.32.020, that
12 may be harmful or hazardous to the public sewer, the private sewage system or the sewage
13 treatment plant or processes. Interceptors and separators shall conform to the requirements and
14 specifications of the Town’s currently adopted plumbing code.
15

16 Interceptors and separators shall be utilized and maintained in continuously efficient
17 operation at all times by the user at the user's expense. Users shall maintain and clean interceptors
18 and separators at least four (4) times annually in order to prevent harmful materials from entering
19 the public wastewater system. The town administrator or designated representative may reduce
20 the maintenance frequency for good cause upon request from the user. All maintenance records
21 shall be provided to the town with a third party affidavit from a commercial hauler indicating the
22 delivery of such material to an appropriate handling facility by the time of the user’s business
23 license expiration date. The third party affidavit shall be a prerequisite for business license
24 issuance.
25

26 **13.32.040 – Remedial action.**

27 If any waters or wastes are discharged or are proposed to be discharged to the public
28 wastewater system containing the substances or possessing the characteristics enumerated in
29 Section 13.32.020 of this Chapter or otherwise have a deleterious effect upon the public
30 wastewater facilities or public health, the town administrator may enforce one or more remedies
31 which include, but are not limited to:

- 32 A. Following a notice of violation and demand for abatement from the Town,
33 disconnecting potable water service and refusing to accept the wastes into the public
34 wastewater system until all unacceptable discharges have ceased, any system repairs
35 or maintenance related thereto have been completed, and any costs associated
36 therewith to be paid by the user have been paid to the Town;
37
- 38 B. Requiring pretreatment by the user at their own expense to an acceptable condition
39 for discharge to the public wastewater system;
40
- 41 C. Requiring control by the Town over the quantities and rates of discharge;
42

1 D. Requiring payment by the User to the Town to cover the Town's actual cost of
2 handling and treating the wastes as set forth in Section 13.32.110; or
3

4 E. Commencing an action in municipal, county, or district court, as appropriate to
5 pursue appropriate legal and/or equitable relief arising out of or related to the
6 violation
7

8 **13.32.050 – Control manhole.**
9

10 Any user who discharges any industrial waste, any wastewater identified as having a
11 strength in excess of normal domestic strength wastewater, or any nonacceptable waste as
12 defined in Section 13.32.020 into the public wastewater system shall install a suitable control
13 manhole in the building wastewater line to facilitate observation and sampling of the waste by
14 the Town. Such manholes shall be accessible and safely located and shall be constructed in
15 accordance with plans approved by the Town. They shall be installed and maintained by the user
16 at the user's expense
17

18 **13.32.060 – Pretreatment of unacceptable wastes.**

19 Where investigation reveals the presence in the system of nonacceptable wastes or if it is
20 known that such wastes will be produced, the owner, lessor, renter or occupant of any lot, land,
21 building, or premises from which such wastes emanate shall be required at his or her own
22 expense to treat, neutralize or in other ways prepare the noxious substance therein to convert the
23 same into acceptable wastes.

24 **13.32.070 – Industrial discharge permit.**

25 All users who propose to connect to the Town's public wastewater facilities in order to
26 discharge industrial waste as defined in 13.32.010 shall require an industrial discharge permit. A
27 permit application shall be filed with the town administrator or designated representative and
28 shall contain the following information:

29 A. The name, address and location of the discharger.
30

31 B. The standard industrial classification (S.I.C.) number of the business according to the
32 standard industrial classification manual.
33

34 C. Disclosure of wastewater constituents and characteristics, including but not limited to
35 those mentioned in this Article, including the regulations of the United States
36 Environmental Protection Agency as incorporated herein, as determined by appropriate
37 chemical or biological analysis. Sampling and analysis shall be performed in accordance
38 with the procedures established by the United States Environmental Protection Agency
39 and contained in 40 C.F.R. Part 136, as amended.
40

41 D. Disclosure of the time and duration of discharge.
42

- 1 E. Disclosure of average daily and instantaneous peak wastewater flow rates and gallons per
2 day, including daily, monthly and seasonal variations, if any. All flows shall be
3 measured, unless other verifiable techniques are approved by the public works director
4 due to cost or other reasons.
5
- 6 F. Disclosure of site plans, floor plans, mechanical and pumping plans and details to show
7 all sewers, sewer connections, inspection manholes, sampling chambers and
8 appurtenances by size, location and elevations.
9
- 10 G. A description of activities, facilities and plant processes on the premises, including all
11 materials which are or may be discharged to the sewers and disclosure of the nature and
12 concentration of any pollutants or materials in the discharge prohibited by this Chapter
13 together with a statement regarding whether or not compliance is being achieved with
14 this Chapter on a consistent basis and, if not, whether additional operation and
15 maintenance activities or additional pretreatment would be required in order for the
16 discharger to comply with this Chapter.
17
- 18 H. Where additional pretreatment and/or operation or maintenance activities will be required
19 to comply with this Chapter, a declaration of the shortest schedule by which the
20 discharger will provide such additional pretreatment and/or implementation of additional
21 operation and maintenance activities.
22
- 23 I. Disclosure of each product produced by type, amount, process and rate of production;
24 and disclosure of the type and amount of raw materials utilized (average in maximum per
25 day).

26 All permit applications shall be signed by a principal executive officer of the discharger,
27 under oath and subject to the penalties of perjury, and shall be approved by an engineer licensed
28 to practice in the State.

29 **13.32.080 – Structures required for discharge permit.**

30 Any user who requires a discharge permit shall install a suitable structure, together with such
31 necessary meters and other appurtenances in the building sewer, to facilitate observation, sampling
32 and measurement of the wastes. Such structure shall be constructed in accordance with plans
33 approved by the town administrator or designated representative. The structure shall be installed
34 and maintained by the owner at his or her expense so as to be safe and accessible at all times.

35 **13.32.090 – Industrial discharge permit conditions and reporting.**

- 36 A. All industrial users regulated by the state or EPA that are that are applying for or hold a
37 Notice of Discharge Requirements (NDR) issued by the Colorado Department of Public
38 Health and Environment (CDPHE) pursuant to Regulation 63, shall copy the Town on the
39 following items:
40
41 1. NDR application information;

- 1
2 2. The NDR issued by the CDPHE;
3
4 3. All reports required by the NDR; and
5
6 4. Any other report or documentation reported to the CDPHE as required by the NDR or
7 Regulation 63.
8

9 B. All industrial users that are Categorical Industrial Users shall notify the Town that they
10 are located within the Town and meet the definition of an industrial user. The industrial
11 user shall copy the Town on all reports, documents and notifications that are reported to
12 EPA pursuant to 40 CFR Part 403 and the applicable Categorical Standard. A
13 Categorical Industrial User (CIU) means an Industrial User subject to a Categorical
14 Pretreatment Standard that appears in 40 CFR chapter I, subchapter N, Parts 405-471.
15

16 C. Once every six months, all users operating under an industrial discharge permit shall file
17 a written report with the public works director. This report shall contain at least the
18 following information:
19

- 20 1. The nature and concentration of prohibited or regulated substances in the effluent.
21
22 2. A record of all measured or estimated average and minimum daily flows during the
23 reporting period.
24
25 3. Whether or not the applicable pretreatment standards or requirements are being met
26 on a consistent basis; and whether additional pretreatment may be necessary in order
27 to bring the discharger into compliance with the applicable standards.
28
29 4. The results of all sampling and analysis of the discharge, including the flow and
30 nature of the concentration or production en masse where required by the public
31 works director. All analyses shall be performed in accordance with 40 C.F.R. Part
32 136.
33

34 D. All such periodic reports shall be signed by a responsible official of the discharger, under
35 oath, and subject to the penalties of perjury; and, if required by the public works director,
36 shall be signed by an engineer licensed to practice in the State.
37

38 **13.32.100 – Enforcement of discharge permits.**
39

40 A. The town administrator or designated representative may revoke the permit of any
41 discharger who:

- 42 1) Fails to factually report the wastewater constituents and characteristics of its
43 discharge.
44 2) Fails to report significant changes in wastewater constituents and characteristics.

- 1 3) Refuses reasonable access to the discharger's premises by representatives of the
2 authority for the purpose of inspection or monitoring.
- 3 4) Violates the conditions of its permit, this Chapter or any final judicial order entered
4 with respect thereto.
- 5 B. In the event a user violates the conditions of the discharge permit or fails to report
6 discharge in the manner specified in Section 13.32.090, the town administrator is
7 authorized to suspend potable water service when the actual or threatened discharge
8 presents an imminent or substantial danger to the health or welfare of persons, the
9 environment, operation of the public wastewater facilities, violates any pretreatment
10 limits imposed by this Chapter or any discharge permit issued pursuant to this Chapter.
- 11 C. Any discharger notified of the suspension of wastewater treatment service or of the
12 discharge permit shall, within a reasonable period of time as determined by the public
13 works director, cease all discharges. In the event of failure of the user or discharger to
14 comply voluntarily with the suspension order within the specified time, the town
15 administrator and Town Attorney, with authorization from Town Council, may initiate
16 judicial proceedings to induce compliance with such order and obtain any other legal
17 and/or equitable relief.
- 18 D. Any user who violates any of the provisions of this Chapter, the rules or regulations
19 adopted pursuant hereto, or a term and condition of any permit issued pursuant to this
20 Chapter will be subject to the general penalty in Section 1.20.010 of this code.

21 **13.32.110 – Recovery of costs**

22 Any user who violates any of the provisions of this Chapter, discharges or causes a
23 discharge producing a deposit or obstruction, or causes damage to or impairs the Town's public
24 wastewater facilities, shall be liable to the Town for any expense, loss or damage caused by such
25 violation or discharge. The Town shall bill the user for the costs incurred by the town in any
26 cleaning or repair replacement work caused by the violation or discharge. Refusal to pay the
27 assessed cost shall constitute a violation of this Chapter enforceable as provided in this Chapter
28 and shall constitute a lien on the User's property which may be enforced pursuant to Section
29 13.12.140 of the Code.

30
31 **13.32.120 – Right of entry.**

- 32 A. The town administrator, or designated representative, shall be permitted to enter the
33 property of all users for the purposes of inspection, observation, measurement, sampling
34 and testing pertinent to sewage discharge to the Town's public wastewater facilities in
35 accordance with the provisions of this Chapter. While performing work pursuant to this
36 Chapter, all employees of the town shall observe all safety rules applicable to the premises
37 established by the owner or contractor for his or her own employees.
- 38
39 B. The town administrator, or designated representative, shall be permitted to enter all private
40 properties through which the Town holds a duly negotiated easement for the purposes of,

1 but not limited to, inspection, observation, measurement, sampling, repair, maintenance or
2 replacement of any portion of the public wastewater system lying within said easement.
3 All entry and subsequent work, if any, on said easement, shall be done in full accordance
4 with the terms of the easement.

5 **13.32.130. – Sewer service surcharge**

6 A. Major contributing user surcharge: The surcharge applied in addition to sewer service
7 charges to mitigate the additional impact on the town’s public wastewater system is
8 applicable to users that have or may have in the future pretreatment or industrial
9 wastewater reclamation agreements with the town. The surcharge is as set forth in town’s
10 Directory of Fees.

11
12 B. Sampling charge: Those industrial and commercial contributors who contribute
13 wastewater which is monitored by the Town shall pay a sampling charge as set forth in
14 the Town’s Directory of Fees. For tests completed by outside certified laboratories,
15 contributors will be charged the cost of the required testing.

16 **3. Section 13.36 Amendment.** Section 13.36 of the Town Municipal Code is repealed in its
17 entirety and replaced by the following text:

18
19 **Chapter 13.36 – Cross Connections**

20
21 **13.36.010 – Responsibility of enforcement.**

22 The town administrator or designated representative shall be responsible for the
23 management of the water system of the Town and all of the property appertaining thereto. He or
24 she shall see that such system and such property are in good working order and repair. He or she
25 shall ensure proper compliance with all local, state and federal regulations for the collection,
26 transmission, treatment, and distribution of water and shall perform all other duties in connection
27 with such system as may be required of him or her by the town council. This responsibility shall
28 include enforcement of the provisions of this Chapter.

29 The town administrator or designated representative is hereby delegated the responsibility
30 to implement a cross-connection control program in accordance with this Chapter, and for the
31 enforcement thereof. If a backflow prevention device is required at the Town water service
32 connection to any owner's premises for the protection of the municipal water system, the town
33 administrator, or designated representative, shall give notice in writing to the owner to install an
34 approved backflow prevention assembly at each service connection to the premises. The owner
35 shall install an approved assembly or assemblies at the owner's own expense. No provision of
36 this Chapter exempts the owner from the cross-connection control provisions for internal water
37 distribution systems as contained in the plumbing code adopted by the Town from time to time.

38 **13.36.020 - Authority.**

1 The authority to implement and maintain this program of cross connection control in
2 addition to this chapter, is contained in the following legislative actions:

- 3 A. Sections 25-1-114 and 25-1-114.1, C.R.S.;
- 4 B. Regulation NO.11 – Colorado Primary Drinking Water Regulations, Section 11.39;
- 5 C. CDPHE Policy 7: Backflow Prevention and Cross-Connection Control Rule Policy
- 6 D. Occupational Safety and Health Administration Federal Register No. 202 Part 2, Page
7 22234, Subpart J;
- 8 E. Uniform Plumbing Code of the International Plumbing and Mechanical Officials,
9 Chapter 10, Sections 1001, 1002 and 1003.2.0;

10 **13.36.030 – Definitions.**

11 The following terms as used in this chapter shall have the meanings hereinafter
12 designated:

13 "Air gap" means the unobstructed vertical distance through the free atmosphere between
14 the lowest opening from any pipe or faucet supplying water to a tank, plumbing fixture, other
15 device or vessel and the flood level rim of said vessel.

16 "Approved backflow prevention device (assembly)" means a device listed in the latest
17 University of Southern California Foundation for *Cross Connection* Control and Hydraulic
18 Research (F.C.C. and H.R.) "List of Approved Backflow Prevention Assemblies."

19 "Backflow" means the undesirable reversal of the direction of flow of the water or
20 mixtures of water and other liquid, gases, or other substances into the distribution pipes of the
21 potable water supply from any source or sources caused by backpressure or backsiphonage.

22 "Backpressure" means backflow caused by a pump, elevated tank, boiler or means that
23 could create an elevated pressure within the nonpotable water system greater than the supply
24 pressure.

25 "Backsiphonage" means the flow of water or other liquids, mixtures or substances into
26 the distribution pipes of a potable water supply system from any source other than its intended
27 source caused by negative or subatmospheric pressure in the potable water supply system.

28 "Certified cross connection control technician" means a person who has shown his or her
29 competency and has passed the cross connection control technician certification examination
30 given by the Water Distribution and Wastewater Collection Systems Council. This person shall
31 be familiar with appropriate laws and rules, and shall be able to make competent tests and repairs
32 on all approved backflow prevention devices, and stay abreast of all new products and
33 information on the subject. The technician shall be listed by the Colorado Department of Health.

34 "Check valve" means a self-closing device which is designed to permit the flow of fluids
35 in one (1) direction and to close if there is a reversal of flow.

1 "Colorado Department of Health Cross-Connection Control Manual" means a manual
2 that has been published by the State addressing cross-connection control practices which will be
3 used as a guidance document for the utility in implementing a cross-connection control program.

4 "Containment" means protection by the installation of an approved backflow prevention
5 device or method on the water service line(s) serving any premises, location, facility, or area.
6 Protection by containment shall be used when the potable water system may be contaminated or
7 polluted by substances used within a building or premises.

8 "Contamination" means an impairment of the quality of the potable water by sewage,
9 industrial fluids or waste liquids, compounds, or other materials to a degree which creates an
10 actual hazard to the public health through poisoning or through the spread of disease.

11 "Controlled" means having a properly installed, maintained, and tested or inspected
12 backflow prevention assembly or backflow prevention method that prevents backflow through a
13 cross-connection.

14 "Critical level" means the critical level (C-L or C/L) marking on a backflow prevention
15 device assembly or vacuum breaker which is a point conforming to approved standards and
16 established by the testing laboratory (usually stamped on the device by the manufacturer), which
17 determines the minimum elevation above the flood-level rim of the fixture, highest point of
18 usage, or receptacle served at which the device may be installed. When a backflow prevention
19 device assembly does not bear a critical level marking, the bottom of the vacuum breaker,
20 combination valve or any such approved device assembly shall constitute the critical level.

21 "Cross connection" means any physical arrangement whereby a potable water supply is
22 connected, directly or indirectly, with any other water supply system, sewer, drain, conduit, tank,
23 plumbing fixture, or other device which contains or may contain contaminated water, sewage, or
24 other waste, liquid or gas of unknown or unsafe quality which may be capable of imparting
25 contamination or pollution to the potable water supply as a result of backflow.

26 "Cross-connection, controlled" means a connection between a potable water system and a
27 nonpotable water system with an approved backflow prevention assembly properly installed that
28 will continuously afford the protection commensurate with the degree of hazard.

29 "Cross-connection, uncontrolled" means a connection between a potable water system
30 and a nonpotable water system that does not have an approved backflow prevention assembly
31 installed.

32 "Customer" means the person or organization responsible for the water utility account for
33 the premises and includes authorized employees or agents or the owner.

34 "Distribution main" means that portion of the water supply system that transmits and
35 distributes water of the town from treatment or storage facilities to users excluding service lines.

1 “Double check valve assembly” means an assembly of two (2) independently operating
2 approved check valves with tightly closing shut-off valves on each side of the check valves, plus
3 properly located test cocks for the testing of each check valve. The entire assembly shall meet
4 the design and performance specifications and approval of a recognized and utility-approved
5 testing establishment for backflow prevention assemblies. To be approved, these assemblies
6 must be readily accessible for in-line maintenance and testing and be installed where no part of
7 the device will be submerged.

8 “Hazard, degree of” means the term is derived from an evaluation of the potential risk to
9 public health and the adverse effect of the hazard upon the potable water system.

10 “Hazard, health” means any condition, device or practice in the water supply system and
11 its operation which could create or, in the judgment of the town administrator, may create, a
12 danger to the health and well-being of the water consumer. An example of a health hazard is a
13 structural defect, including cross-connections, in a water supply system, or a direct connection of
14 a potable water supply line to a sanitary sewer.

15 “Hazard, plumbing” means a plumbing type cross-connection in a consumer's potable
16 water system that has not been properly protected by a vacuum breaker, air-gap separation or
17 backflow prevention assembly. Unprotected plumbing type cross-connections are considered to
18 be a health hazard.

19 “Hazard, pollution” means an actual or potential threat to the physical properties of the
20 water system or to the potability of the public potable water system or the consumer's potable
21 water system, but which would constitute a nuisance or be aesthetically objectionable or could
22 cause damage to the system or its appurtenances, but would not be dangerous to health.

23 “Hazard, system” means an actual or potential threat of severe damage to the physical
24 properties of the public potable water system or the consumer's potable water system or of a
25 pollution or contamination which would have a protracted effect on the quality of the potable
26 water in the system.

27 “Industrial fluids system” means any system containing a fluid or solution which may be
28 chemically, biologically or otherwise contaminated or polluted in a system, pollution or
29 plumbing hazard if introduced into an approved water supply. This may include, but not be
30 limited to: polluted or contaminated waters; all types of process waters and used waters
31 originated from the public potable water system which may have deteriorated in sanitary quality;
32 chemicals in fluid form; plating acids and alkalies, circulated cooling waters connected to an
33 open cooling tower and/or cooling towers that are chemically or biologically treated or stabilized
34 with toxic substances; contaminated natural waters such as from wells, springs, streams, rivers,
35 lakes, dams, ponds, retention pits, irrigation canals, systems, etc.; oils, gases, glycerine,
36 paraffins, caustic and acid solutions and other liquid and gaseous fluids used in industrial or
37 other purposes or for fire-fighting purposes.

38 “Nonpotable water” means water that is not safe for human consumption or that is of
39 questionable quality.

1 "Pollution" means the presence of any foreign substance (organic, inorganic, radiological,
2 or biological) in the water that may degrade the water quality so as to constitute a non-health
3 type hazard or impair its usefulness.

4 "Potable water" means water free from impurities in amounts sufficient to cause disease
5 or harmful physiological effects. The bacteriological, chemical, and radiological quality shall
6 conform with the state of Colorado Primary Drinking Water Regulations.

7 "Reduced pressure principal assembly" means an assembly of two (2) independently
8 operating approved check valves with an automatically operating differential relief valve
9 between the two (2) check valves, tightly closing shut-off valves on either side of the check
10 valves, plus properly located test cocks for the testing of the check and relief valves. The entire
11 assembly shall meet the design and performance specifications and approval of a certified cross-
12 connection control technician. The assembly shall operate to maintain the pressure in the zone
13 between the two (2) check valves at a level less than the pressure on the public water supply side
14 of the device. At cessation of normal flow, the pressure between the two (2) check valves shall
15 be less than the pressure on the public water supply side of the device. In case of leakage of
16 either of the check valves, the differential relief valve shall operate to maintain the reduced
17 pressure in the zone between the check valves by discharging to the atmosphere. To be approved,
18 the assembly must be readily accessible for in-line maintenance and testing and be installed in a
19 location where no part of the device will be submerged.

20 "Service line" means the water line extending from the point of connection at the
21 corporation stop.

22 "Survey" means a survey of property plumbing conducted by an authorized employee of
23 the town for the purposes of identifying cross-connections, both controlled and uncontrolled.

24 "User" means any person who uses, takes water from or is connected to the water supply
25 system of the town.

26 "Vacuum" means any pressure less than that exerted by the atmosphere.

27 "Vacuum breaker, atmospheric nonpressure type" means a vacuum breaker consisting of
28 an air inlet opening and a nonloaded check disk valve designed to prevent backsiphonage only.
29 The assembly shall not be subjected to continuous static line pressure or backpressure or be
30 installed where it would be under pressure for more than twelve (12) hours in any twenty-four-
31 hour period.

32 "Water service connection" means the terminal end of the town's service; i.e., where the
33 town loses jurisdiction and sanitary control over the water at its point of delivery to the customer.
34 There shall be no unprotected take-offs from the service line ahead of any meter or backflow
35 prevention assembly located at the point of delivery to the customer's water system. Service
36 connection shall also include water service connection from a fire hydrant and all other
37 temporary or emergency water service connections from the public potable water system.

1 “Water supply system” means a water distribution system, piping, connection fittings,
2 valves and appurtenances within a building, structure, or premises. Water supply systems are
3 also referred to commonly as premise plumbing systems.

4 **13.36.040 – Water system.**

5 The municipal water system shall consist of the source and distribution facilities of the water
6 system to the point of the owner's system. The source shall include all components of the
7 facilities utilized in the production, treatment, storage and delivery of water to the distribution
8 system. The distribution system shall include the network of conduits used for the delivery of
9 water from the source to the owner's system. The owner's water supply system shall begin at the
10 water service connection.

11 **13.36.050 – Types of backflow prevention assemblies.**

12 The type of protective assembly required shall depend upon the degree of hazard which
13 exists, as determined by the town administrator or designated representative, based upon the
14 following general guidelines:

- 15 A. Commercial and or Industrial connections to the Towns potable water supply, shall be
16 protected by Air Gap or Reduced Pressure Principal Backflow Device.
17
- 18 B. Multi-family connections where one potable water line serves more than one residential
19 dwelling unit shall be protected by either Air Gap or Reduced Pressure Principal Backflow
20 Device.
21
- 22 C. In the case of any premises where there is an auxiliary water supply and it is not subject to
23 any of the following rules, the municipal water system shall be protected by an approved
24 air-gap separation or an approved reduced pressure principal backflow prevention
25 assembly.
26
- 27 D. In the case of any premises where there is water or any substance that would be
28 objectionable but not hazardous to health if introduced into the municipal water system,
29 the municipal water system shall be protected by an approved double check valve
30 assembly.
31
- 32 E. In the case of any premises where there is any material dangerous to health which is
33 handled in such a fashion as to create an actual or potential hazard to the municipal water
34 system or there has been a backflow incident, either suspected or documented, the
35 municipal water system shall be protected by an approved air-gap separation or an
36 approved reduced pressure principal backflow prevention assembly.
37
- 38 F. In the case of any premises where there are uncontrolled cross-connections, either actual
39 or potential, the municipal water system shall be protected by an approved reduced
40 pressure principal backflow prevention assembly at the service connection.
41

1 G. In the case of any premises where, because of security requirements or other prohibitions
2 or restrictions, it is impossible or impractical to make a complete in-plant cross-
3 connection survey, the municipal water system shall be protected against backflow or
4 backsiphonage from the premises by the installation of a backflow prevention assembly
5 in the service line. In this case, maximum protection shall be required; that is, an air gap
6 shall be installed in each service connection to the premises.

7 **13.36.060 – Installation, testing, & inspections for backflow assemblies**
8

- 9 A. Building plans must show water service size and location, backflow prevention device size,
10 type and location, fire sprinkling system service line size and type of backflow prevention
11 device, as must any irrigation system on the premises.
12
13 B. Backflow prevention devices are to be installed by a licensed plumber in an accessible
14 location to facilitate testing, maintenance and repair. They shall be installed downstream
15 of water meters. There shall be no connections or tees between the meter and service line
16 backflow prevention device.
17
18 C. In order to insure that backflow prevention devices continue to operate satisfactorily, it will
19 be necessary that they be tested at the time of installation and on an annual schedule
20 thereafter. Such test will be conducted in accordance with F.C.C. and H.R. performance
21 standards as directed by the Colorado Department of Health and the town by a certified
22 cross connection control technician.
23
24 D. All costs for design, installation, maintenance, repair and testing are to be borne by the
25 customer.
26
27 E. No grandfather clause exists. All laws and regulations apply regardless of the age of the
28 facility.
29
30 F. Backflow prevention device installations shall be inspected and approved for use by the
31 town.
32

33 **13.36.070 – Right of entry for the inspection of cross-connections.**
34

- 35 A. The Town retains the right to test or otherwise check the installation and operation of any
36 containment device.
37
38 B. The water utility representative assigned to inspect premises relative to possible hazards
39 shall carry proper credentials of his or her office, upon exhibit of which he or she shall
40 have the right of entry during usual business hours to inspect any and all buildings and
41 premises for cross connection in the performance of his or her duties. The right of entry
42 shall be a condition of water service.
43

44 **13.36.080 – Surveys, inspections, testing and repair of cross-connections.**
45

1 It is the responsibility of the owner to grant access to the town for the purpose of conducting
2 cross-connection site surveys. It shall be the responsibility of the owner to correct any identified
3 uncontrolled cross-connections within one hundred twenty (120) days by installing the appropriate
4 backflow prevention assembly for the degree of hazard identified and have certified inspections
5 and operational tests made on the backflow prevention assembly upon installation and at least once
6 per year thereafter. The town administrator or designated representative may require certified
7 inspections at more frequent intervals. These inspections shall be made at the expense of the owner
8 and shall be performed by a certified cross-connection control technician. A backflow prevention
9 assembly shall be repaired or replaced at the expense of the owner whenever an assembly is found
10 to be defective. Site surveys are conducted at no expense to the owner, however correction of
11 identified cross-connections including the purchase, installation, testing, and repairs of backflow
12 prevention assemblies, shall be at the owner's expense.

13
14 **13.36.090 – Reporting and recordkeeping of cross-connections.**

15
16 The certified cross-connection control technician shall report, on the form prescribed by the
17 Town, the results of inspections, tests and maintenance to the town administrator and the water
18 owner. This report shall be submitted to the town administrator or designated representative within
19 ten (10) days following the completion of the inspection, test or maintenance of the device. The
20 certified inspector shall also, on the form prescribed by the Town, attach a card to the backflow
21 prevention assembly following such inspection, test or maintenance activity to document and date
22 the activities performed. Records of all inspections, tests or maintenance activities, including
23 materials and parts changed, shall be kept by the certified cross-connection control technician and
24 the owner. Backflow prevention assemblies that fail testing shall be reported to the town of New
25 Castle immediately by email or phone call.

26
27 **13.36.100 – Approved backflow prevention assemblies.**

28
29 Any backflow prevention assembly required herein shall be of a model and size approved
30 by the town administrator or designated representative. The term approved backflow prevention
31 assemblies means an assembly that has been manufactured in full conformance with the standards
32 established by the American Water Works Association entitled "AWWA C506-78 Standards for
33 Reduced Pressure Principal and Double Check Valve Backflow Prevention Devices," which is
34 hereby adopted by reference in its present form and as it may subsequently be amended from time
35 to time as the time standard. The term approved backflow prevention assembly also means an
36 assembly that has completely met the laboratory and field performance specifications of the
37 Foundation for Cross-Connection Control and Hydraulic Research (FCC and HR) of the
38 University of Southern California established by "Specifications of Backflow Prevention Devices
39 - Section 10," of the most current issue of "Manual of Cross-Connection Control," which is hereby
40 adopted by reference as the City laboratory and field performance specifications. Final approval
41 shall be evidenced by a certificate of approval issued by an approved testing laboratory certifying
42 full compliance with said AWWA standards and FCC and HR specifications. In addition to the
43 aforementioned standards and specifications, all backflow prevention assemblies shall have a
44 unique serial number attached to the device by the manufacturer.

1 **13.36.110 – Enforcement of cross-connection assemblies.**

- 2
- 3 A. It is unlawful for any user or customer to cause or allow the existence of a hazardous cross
- 4 connection which is not contained by an approved backflow prevention device in the
- 5 customer service line to prevent contamination or pollution in the Town's distribution
- 6 mains. Failure of the customer to cooperate in the installation, maintenance, testing, or
- 7 inspection of such devices shall be grounds for discontinuance of water services to the
- 8 premises or the requirement for an air gap separation from the public potable water system.
- 9
- 10 B. Service of water to any premises may be discontinued by the Town after written
- 11 notification, if unprotected cross connections exist on the premises or if any defect is found
- 12 in an installed backflow prevention device or if a backflow prevention device has been
- 13 removed or bypassed. Service shall not be restored until such conditions or defects are
- 14 corrected.
- 15
- 16 C. Discontinuance of service may be summary, immediate, and without written notice
- 17 whenever, in the judgment of the town administrator, such action is necessary to protect
- 18 the purity of the public potable water supply to the safety of the water system.
- 19

20

21 **4. Effective Date.** This Ordinance shall be effective fourteen days after final publication pursuant

22 to section 4.3 of the Town Charter.

23

24 INTRODUCED on January 4th, 2022, at which time copies were available to the Enterprise

25 Board and to those persons in attendance at the meeting, read by title, passed on first reading, and

26 ordered published in full and posted in at least two public places within the Town as required by

27 the Charter.

28

29 INTRODUCED a second time at a meeting of the Enterprise Board on January 18th, 2022,

30 read by title and number, passed without amendment, approved, and ordered published as required

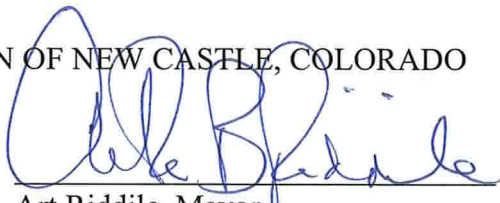
31 by the Charter.

32

33

34 TOWN OF NEW CASTLE, COLORADO

35

36 By: 

37 Art Riddile, Mayor

38

39 ATTEST:

40

41  CMC

42 Melody Harrison, Clerk

43

44

