ORDINANCE NO. 24-0004

AN ORDINANCE OF THE CITY OF MANHATTAN BEACH ESTABLISHING REGULATIONS REGARDING WATER SUPPLY CROSS-CONNECTIONS, AMENDING TITLE 7 OF THE MANHATTAN BEACH MUNICIPAL CODE, AND MAKING A DETERMINATION THAT THE ORDINANCE IS EXEMPT UNDER THE CALIFORNIA ENVIRONMENTAL QUALITY ACT

THE CITY COUNCIL OF THE CITY OF MANHATTAN BEACH DOES ORDAIN AS FOLLOWS:

SECTION 1. A new Chapter 7.46 is hereby added to Title 7 of the Manhattan Beach Municipal Code to read as follows:

"Chapter 7.46 – Cross-Connection Control

Section 7.46.010 - Purpose

The Purpose and Intent of this Section:

A. To comply with the requirements of the permit to operate a public water system, issued to the City by the State Water Resources Control Board (Water Board) related to cross-connection control and backflow prevention. The Cross-Connection Control Policy Handbook (CCCPH) adopted by the Water Board on December 19, 2023, replaces previous regulations with an effective date of July 1, 2024. The CCCPH carries the full force and effect of the law.
B. To protect the City's public potable water supply system from contamination or pollution by isolating the Water User's internal distribution system(s) or the Water User's private water system(s), contaminants or pollutants which could backflow into the City's public water system.
C. To promote the elimination or control of cross-connections, actual or potential, between the Water User's potable water system(s) and hazards such as non-potable water system(s), plumbing fixtures, and industrial systems; and

D. To maintain a Cross-Connection Control Program, which will systematically and effectively minimize the potential for contamination or pollution of the City's potable water system.

Section 7.46.020 - Application

Provisions of the CCCPH and other California Health and Safety Code (CHSC) sections referenced within the CCCPH, which may be amended from time to time, are hereby adopted by the City, incorporated herein by this reference, and made a part hereof as though set forth in full.

The Cross-Connection Control (CCC) program administered by the City shall be accomplished primarily through premises containment; however, the City may on a case-by-case basis, adopt backflow prevention assemblies installed internal to the premise plumbing system, in-lieu of premises containment.

Notwithstanding anything herein to the contrary, the City shall not be legally responsible for identification of all cross-connections, nor the abatement of any cross-connections which may exist within a Water User's premises.

Section 7.46.030 - Definitions

In addition to the definitions outlined in the CCCPH, the following terms are defined for the purpose of this chapter:

1) **Air Gap Separation (AG)**: The term "Air Gap Separation" shall mean a backflow method meeting the requirements of the American Society of Mechanical Engineers (ASME) A112.1.2-2012(R2017), consisting of a physical vertical separation of at least two (2) times the effective pipe diameter between the free-flowing discharge and of a potable water supply pipeline and the flood level of an open or non-pressurized receiving vessel, and in no case less than one (1) inch.
2) **Approved Water Supply**: The term "Approved Water Supply" shall mean a water source that has been approved by the State Water Board for domestic use in a public water system and designated as such in a domestic water supply permit issued pursuant to section 116525 of the CHSC.
3) **Approved Backflow Prevention Assembly**: The term "Approved Backflow Prevention Assembly" shall mean a backflow prevention assembly that is listed by at least one of the following:
   a) Standards found in Chapter 10 of the Manual of Cross-Connection Control, Tenth Edition, published by the University of Southern California Foundation for Cross-Connection Control and Hydraulic Research.
   b) Standards of American Society of Sanitary Engineers International (ASSE) current as of 2022 that include ASSE 1015-2021 for the DC, ASSE 1048-2021 for the DCDA & DCDA-II, ASSE 1013-2021 for the RP, and ASSE 1047-2021 for the RPDA & RPDA-II, and must have the 1YT mark signifying twelve (12) months of field testing has been successfully completed.

4) **Auxiliary Water Supply**: The term "Auxiliary Water Supply" shall mean a source of water, other than an approved water supply, that is either in use, equipped, or can be equipped, to be used as a water supply, and is located on the premises of, or available to, a water user. Examples of auxiliary water supplies include, but are not limited to private wells, storage tanks, and bodies of water (lakes, rivers, streams, ocean).
5) **Backflow**: The term "Backflow" shall mean the undesirable or unintended reversal of flow of water and/or other liquids, gases, or other substances into a public water systems distribution system or approved water supply.
6) **Backpressure**: The term "Backpressure" shall mean a hydraulic condition characterized by the elevation of water pressure within premise piping that has the potential to cause a reversal of the normal direction of water flow.
7) **Backsiphonage**: The term "Backsiphonage" shall mean a hydraulic condition characterized by negative or sub-atmospheric pressure in the potable water supply system that has the potential to cause a reversal of the normal direction of water flow.
8) **Backflow Prevention Assembly**: The term "Backflow Prevention Assembly" shall mean a mechanical assembly designed and constructed to prevent backflow, such as that while in-line it can be maintained and its ability to prevent backflow, as designed, can be field-tested, inspected and evaluated. The types of approved backflow prevention assemblies include:
    a. **Double Check Valve Backflow Prevention Assembly (DC)**: The term DC shall mean an assembly consisting of two independently-acting internally-loaded check valves, with tightly closing shut-off valves located at each end of the assembly (upstream and downstream of the two check valves) and fitted with test cocks that enable accurate field testing of the assembly. This type of assembly may only be used to isolate low hazard cross connections.
    b. **Double Check Detector Backflow Prevention Assembly (DCDA):** The term DCDA shall mean a double check valve backflow prevention assembly that includes a bypass with a water meter and double check backflow prevention assembly, with the bypass water meter accurately registering flow rates up to two gallons per minute and visually showing a registration for all rates of flow. This type of assembly may only be used to isolate low hazard cross connections.
    c. **Double Check Detector Backflow Prevention Assembly- Type II (DCDA-II):** The term DCDA-II shall mean a double check valve backflow prevention assembly that includes a bypass around the second check, with the bypass having a single check valve and a water meter accurately registering flow rates up to two gallons per minute and visually showing a registration for all rates of flow. This type of assembly may only be used to isolate low hazard cross connections.
    d. **Pressure Vacuum Breaker Backsiphonage Prevention Assembly (PVB):** The term PVB shall mean an assembly with an independently-acting internally-loaded check valve and independently-acting loaded air inlet valve located on the discharge side of the check valve; with test cocks and tightly closing shutoff valves located at each end of the assembly that enable accurate field testing of the assembly. This type of assembly may only be used for protection from backsiphonage, and is not to be used to protect from backpressure. PVBs may

only be used as premises containment on roadway right of way irrigation systems not subject to backpressure.

e. **Reduced Pressure Principle Backflow Prevention Assembly (RP)**: The term "RP" shall mean an assembly with two independently acting, internally-loaded check valves, with a hydraulically operating mechanically independent differential-pressure relief valve located between the check valves and below the upstream check valve. The assembly shall have shut-off valves located upstream and downstream of the two check-valves, and test cocks to enable accurate field testing of the assembly.

f. **Reduced Pressure Principle Detector Backflow Prevention Assembly (RPDA)**: the term RPDA shall mean a reduced pressure principle backflow prevention assembly that includes a bypass with a water meter and reduced pressure principle backflow prevention assembly, with the bypasses water meter accurately registering flow rates up to two gallons per minute and visually showing a registration for all rates of flow.

g. **Reduced Pressure Principle Detector Backflow Prevention Assembly – Type II (RPDA-II)**: The term RPDA-II shall mean a reduced pressure principle backflow prevention assembly that includes a bypass around the second check, with the bypass having a single check valve and a water meter accurately registering flow rates up to two gallons per minute and visually showing a registration for all rates of flow.

h. **Spill-Resistant Pressure Vacuum Breaker Backsiphonage Prevention Assembly (SVB):** The term SVB shall mean an assembly with an independently-acting internally-loaded check valve and an independently-acting loaded air inlet valve located on the discharge side of the check valve; with shut off valves at each and at least a test cock and bleed/vent port, to enable accurate field testing of the assembly. This type of assembly may only be used for protection from backsiphonage and is not to be used to protect from back pressure.

9) **Cross Connection**: The term "Cross Connection" shall mean any actual or potential connection or structural arrangement between a public water system, including a piping system connected to the public water system and located on the premises of a water user or available to the water user, and any source or distribution system containing liquid, gas, or other substances not from an approved water supply.

10) **High Hazard Cross Connection**: The term "High Hazard Cross-Connection" shall mean a cross connection that poses a threat to the potability or safety of the public water supply. Materials entering the public water supply through a high hazard cross connection are contaminants (health hazards).

11) **Low Hazard Cross-Connection**: the term "Low Hazard Cross Connection" shall mean a cross connection that has been found to not pose a threat to the potability or safety of the public water supply, but may adversely affect the aesthetic quality of the potable water supply. Materials entering the public water supply through a low hazard cross-connection are pollutants (non-health hazards).

12) **Potential**: The term "Potential" shall mean having or showing the capacity to become or develop into something in the future.
13) **Premises Containment**: The term "Premises Containment" shall mean protection of a public water systems distribution system from backflow from a user's premises through the installation of one or more air gaps or backflow prevention assemblies, installed as close as practical to the user service connection, in a manner that isolates the water users water supply from the public water systems distribution system.
14) **Service Connection**: The term "Service Connection" shall mean the downstream end of the water meter, or the point in a water system where the approved water supply can be protected from backflow using an air gap or backflow prevention assembly. This is the point of delivery to the Water User's water system where the City loses jurisdiction and sanitary control of the water.
15) **User Supervisor**: The term "User Supervisor" shall mean a person designated by a Water User to oversee a water use site and who is responsible for preventing cross connections.
16) **Used Water**: The term "Used Water" shall mean any water supplied by the City from a public potable water system to a Water User's water system after it has passed through the service connection and is no longer under the City's control.
17) **Water User**: The term "Water User" shall mean any person obtaining water from the public water system.

Section 7.46.040 - Determination

The City shall ensure a survey of its service area and that hazard assessments are conducted to identify Water User premises where actual or potential cross-connections are likely to occur. Such hazard assessments shall evaluate the degree of hazard, and any backflow protection needed. Hazard assessments must be completed in accordance with the City's Cross-Connection Control Plan approved by the State Water Resources Control Board.

Section 7.46.050 - Notice

Upon determination by the City that a cross-connection exists, the City shall give written notice to the affected Water User to install an approved backflow prevention assembly of a type and quality, and at a specific location, deemed appropriate by the City. The Water User shall install backflow prevention assemblies and methods at their own expense, and in the manner prescribed by the City.

Section 7.46.060 - Installation

The location of any approved backflow prevention assembly installed pursuant to this Section shall be at the Water User's point of connection to the City's water System; within the Water User's premises, or both, as determined by the City's Cross-Connection Control Specialist. Where an approved backflow prevention assembly is required to be installed on the Water User's connection to the City's water, it shall be located at or near the property

line of the premises or immediately outside the building being served, but, in all cases, at a place deemed acceptable by the City so that it is located before the first branch line leading off the service line. In all cases, backflow prevention assemblies shall be installed in accordance with the applicable City engineering specifications.

A. **Typical Conditions**: Conditions where an approved backflow prevention assembly is required on each service connection, shall include, but are not limited to the following:
   1. In the case of a property having an Auxiliary Water Supply, or one that is being fed by another outside water source, the public water system shall be protected against backflow from the premises by installing an approved Air Gap (AG) or Reduced Pressure Principle Backflow Prevention Assembly (RP).
   2. In the case of a property on which toxic chemicals, pollutants, industrial fluids, or any other objectionable substances are handled or stored in such a fashion as to create an actual or potential hazard to the City's system, the public water system shall be protected against backflow from the premises by installing an approved AG or RP.
   3. In the case of a property having internal cross-connections that cannot be permanently corrected or protected against, or intricate plumbing and piping arrangements, or where entry to all portions of the premises is not readily accessible for inspection purposes, making it impracticable or impossible to ascertain whether or not dangerous cross-connections exist, the public water system shall be protected against backflow from the property by installing an approved RP.
   4. In the case of a property being served by two or more water services, domestic and fire services, domestic and irrigation services, or any combination thereof, the public water system shall be protected against backflow from the premises by installing an approved RP on each service connection. At the discretion of the City, a fire service supplying a water only fire suppression system (no storage tanks, pumps, fire fighting foams, or corrosion inhibitors) may be isolated from the water distribution system through the installation of an approved Double-Check Detector Backflow Prevention Assembly (DCDA) or Double-Check Detector Backflow Prevention Assembly – Type II (DCDA-II).
   5. In the case of a property having a solar heating system of a heat exchanger type that utilizes a recirculating pump, air conditioning units with chemical injection pots, or coolers with recirculating pumps, the public water system shall be protected against backflow from the premises by installing an approved RP.
   6. In the case of a property on which there is water or a substance that may not be lawfully added to an Approved Water Supply, but not hazardous to the public's health if introduced into the public water system, the public water system shall be protected against backflow from the premises by installing an approved Double-Check Backflow Prevention Assembly (DC).
   7. In the case of a single-family or multi-family residential property where unprotected cross-connection exist, such as piping systems and fixtures that do not comply with the California Plumbing Code adopted by the City, the public water system shall be protected against backflow from the premises by installing an approved RP.

8. In the case of a single-family property containing a fire suppression system not configured to passively purge stagnant water through points of frequent water use, a DC shall be required to be installed at the point of connection of the fire suppression system, unless an RP is required at the point of service. Prior to the retrofit of a residential fire suppression system, the water user shall provide the City with system calculations performed by a licensed professional demonstrating the system will function properly after the installation of the backflow prevention assembly. All costs associated with the system calculation and any required system modifications shall be the responsibility of the water user.
9. In the case of a commercial fire sprinkler system found to have a single check valve, or single detector check for backflow prevention, The system shall be retrofitted with a backflow prevention assembly appropriate for the degree of hazard. Prior to the retrofit of a commercial fire suppression system, the water user shall provide the City with system calculations performed by a licensed professional demonstrating the system will function properly after the installation of the backflow prevention assembly. All costs associated with the system calculation and any required system modifications shall be the responsibility of the water user.

B. **Typical High-Hazard Facilities**: The CCCPH, Appendix D contains a partial list of high hazard facilities where the installation of approved AG or RP is required. This is not an exclusive list; other high hazards exist and will be identified by the cross-connection control specialist as part of a hazard assessment.

1. Sewage handling facilities
2. Wastewater lift stations and pumping stations
3. Wastewater treatment processes, handling, or pumping equipment that is interconnected to a piping system connected to a PWS (+).
4. Petroleum processing or storage plants
5. Radioactive material storage, processing plants or nuclear reactors
6. Mortuaries
7. Cemeteries
8. Sites with an auxiliary water supply interconnected with PWS (+)
9. Sites with an auxiliary water supply not interconnected with PWS
10. Premises with more than one connection to the PWS (+)+++
11. Recycled water (++)(+++)
12. Recycled water interconnected to piping system that contains water received from a PWS (+)
13. Graywater systems, as defined in California Water Code Section 14876, that are interconnected to a piping system that is connected to a PWS
14. Medical facilities
15. Kidney dialysis facilities
16. Dental office with water-connected equipment
17. Veterinarian facilities
18. Chemical plants

19. Laboratories
20. Biotech facilities
21. Electronics manufacture
22. Dry cleaner facilities
23. Industrial or commercial laundry facilities
24. Metal-plating facilities
25. Business park with a single meter serving multiple businesses
26. Marine-port facilities
27. Car wash facilities
28. Mobile home park, RV park, or campgrounds with RV hookups
29. Hotels/motels
30. Gas stations
31. Fire stations
32. Solid waste disposal facilities
33. Pet groomers
34. Agricultural premises
35. Hazard assessment access denied or restricted
36. Railroad maintenance facilities
37. Incarceration facilities (e.g. prisons)
38. Temporary connections to fire hydrants for miscellaneous uses, including construction
39. Private water distribution mains
40. Drinking water storage tank overflow connected to a sump or storm drain (+)
41. Airports

(+) Premise isolated by air gap only except as allowed through CCCPH Section 3.2.2(c)

(++) Dual-plumbed use areas established per CCR Title 22, Section 60313 through 60316.

(+++) Residences using recycled water for landscape irrigation as part of an approved dual plumbed use area established pursuant to CCR Title 22, sections 60313 through 60316 shall use, at a minimum, a DC. If the water supplier is also the supplier of the recycled water, then the recycled water supplier may obtain approval of the local public water supplier or the State Water Board, to utilize an alternative backflow protection plan that includes an annual inspection of both the recycled water and potable water systems and an annual cross-connection test of the recycled water and potable water systems pursuant to subsection 60316(a) in lieu of any BPA.

(++++) All connections must receive at least the same level of protection excluding fire protection when connected to the PWS distribution system (e.g. if one connection requires an RP then all connections must have RPs installed).

Section 7.46.070 - Inspection, Testing and Maintenance

The City shall require a field test to be performed at the time of installation and at least once per year thereafter. The City may determine the necessity for more frequent testing on a case by case basis. Contractors performing the assembly testing are required to be certified in accordance with Article 4 of the CCCPH. The City shall maintain a list of certification entities meeting this criteria.

In the event that a backflow prevention assembly fails the required testing, or is otherwise found to not comply with City requirements, the Water User shall cause the necessary repairs or replacements to be completed within the timeframe provided by the City. Following such repair or replacement, passing test results shall be submitted to the City within three (3) calendar days. All costs associated with the inspection, testing, and maintenance of required backflow prevention assemblies shall be borne by the Water User. Test results and records of all inspections, replacements, and repairs performed on required backflow prevention assemblies shall be maintained by the Water User and reported to the City in a manner deemed acceptable to the City.

Section 7.46.080 - Enforcement

The City may discontinue or refuse to supply water and/or sewer service to any premises that is not in strict compliance with the requirements of this Chapter, or if it is found that a required backflow prevention assembly has been removed, bypassed, or otherwise modified, or if unprotected cross-connection otherwise exist on the premises. The City may also disconnect water and/or sewer service to any premises if the health and safety of any person is immediately threatened by a cross-connection. The City may refuse to restore such service to the premises until the cross-connection is controlled through the proper installation and testing of an approved backflow prevention assembly.

Section 7.46.090 - Administration

The Public Works Director shall maintain policies and procedures consistent with the purpose of this Chapter, and appoint at least one (1) person certified as a

Cross-Connection Control Specialist to administer the provisions of this Chapter.

SECTION 2. CEQA. The City Council finds that it can be seen with certainty that there is no possibility the adoption of this Ordinance may have a significant effect on the environment because it would result in no physical impacts to the environment, and will provide for greater environmental protection by preventing contamination of the City's water supply. It is therefore exempt from California Environmental Quality Act review pursuant to Title 14, Section 15061(b)(3), of the California Code of Regulations. Further, as a separate and independent basis, the Ordinance is not a project for CEQA purposes because it will have no physical impact on the environment, and thus, pursuant to CEQA Guidelines Section 15060(c)(3) is not subject to further environmental review.

SECTION 3. Any provisions of the Municipal Code, or any other resolution or ordinance of the City, to the extent that they are inconsistent with this Ordinance are hereby repealed, and the City Clerk shall make any necessary changes to the Municipal Code for internal consistency.

SECTION 4. If any part of this Ordinance or its application is deemed invalid by a court of competent jurisdiction, the City Council intends that such invalidity will not affect the effectiveness of the remaining provisions or their application and, to this end, the provisions of this Ordinance are severable.

SECTION 5. The City Clerk shall certify to the passage and adoption of this Ordinance and shall cause this Ordinance to be published within 15 days after its passage, in accordance with Section 36933 of the Government Code.

SECTION 6. The Ordinance shall go into effect and be in full force and effect at 12:01 am on the 31st day after its passage.

ADOPTED on November 6, 2024.

AYES: Napolitano, Montgomery, Franklin, Lesser, and Mayor Howorth.
NOES: None.
ABSENT: None.
ABSTAIN: None.

AMY HOWORTH
Mayor

ATTEST:

LIZA TAMURA
City Clerk