

# Supplement to the NPC 2020: Intent Statements

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# Introduction

## Background

The national code development system underwent a governance change in November 2022 to support efforts to harmonize construction codes in jurisdictions throughout Canada. The CCBFC, which had been in place since 1991, was dissolved and replaced by a new governance structure in which the Canadian Board for Harmonized Construction Codes (CBHCC) is responsible for developing, approving and maintaining the National Model Codes based on the strategic priorities set by the Canadian Table for Harmonized Construction Codes Policy. The 2020 National Model Codes and related intent statements were developed by the CCBFC.

## Understanding the Content of the Supplement to the NPC 2020: Intent Statements

The 2020 editions of the National Model Codes are presented in an “objective-based code” format that is structured in three Divisions (A, B and C). The Codes contain explicitly defined objectives and functional statements (see Division A), which are statements on the functions that the components of a building or facility must perform and the objectives that these functions must satisfy. Most of the Code provisions in Division B—called acceptable solutions—are linked to at least one of those objectives and functional statements. The sets of objectives and functional statements are referred to as “attributions.”

Intent statements serve explanatory purposes only and do not form an integral part of the Codes. They contain useful information that helps Code users understand the rationale behind requirements. This contributes to a more accurate interpretation and application of acceptable solutions and a clearer understanding of what alternative solutions should achieve.

Only the provisions in Part 2 of Division B of the National Plumbing Code of Canada (NPC) have intent statements.

For further information on the objective-based code format, including objectives, functional statements and intent statements, users should refer to the preface of the relevant Code.

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## **Intent Statements: NPC 2020**

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### **Provision: 2.1.1.1.(1)**

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#### **Intent(s)**

*Intent 1.* To state the application of Part 2.

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### **Provision: 2.1.2.1.(1)**

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#### **Objective**

OH2

#### **Attributions**

[F72-OH2.1]

#### **Intent(s)**

*Intent 1.* To limit the probability that sanitary waste will discharge into an inappropriate disposal system, which could lead to unsanitary conditions, which could lead to harm to persons.

*Intent 2.* To exempt sanitary drainage systems from the application of this requirement in situations where they could supply systems covered in Section 2.7.

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### **Provision: 2.1.2.1.(2)**

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#### **Objective**

OH2

#### **Attributions**

[F72-OH2.1]

#### **Intent(s)**

*Intent 1.* To limit the probability that sanitary drainage systems will be overloaded, which could lead to raw sewage and storm water backing up into buildings, which could lead to flooding in buildings, which could lead to unsanitary conditions, which could lead to harm to persons.

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#### **Objective**

OP5

#### **Attributions**

[F72-OP5]

#### **Intent(s)**

*Intent 1.* To limit the probability that sanitary drainage systems will be overloaded, which could lead to raw sewage and storm water backing up into buildings, which could lead to flooding in buildings, which could lead to damage to the building or facility.

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### **Provision: 2.1.2.2.(1)**

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#### **Objective**

OP5

#### **Attributions**

[F72-OP5]

#### **Intent(s)**

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## **Intent Statements: NPC 2020**

*Intent 1.* To limit the probability that storm water will be improperly disposed of, which could lead to flooding in buildings, which could lead to damage to the building or facility.

*Intent 2.* To exempt storm drainage systems from the application of this requirement in situations where they could be connected to other systems covered in Section 2.7.

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### **Provision: 2.1.2.3.(1)**

#### **Objective**

OH2

#### **Attributions**

[F46-OH2.2]

#### **Intent(s)**

*Intent 1.* To limit the probability that water distribution systems in buildings will be connected to non-potable water sources, which could lead to the contamination of potable water distribution systems, which could lead to harm to persons.

*Intent 2.* To exempt water distributions systems from the application of this requirement in situations where they could be connected to other systems covered in Section 2.7.

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### **Provision: 2.1.2.4.(1)**

#### **Objective**

OH2

#### **Attributions**

[F71-OH2.1, OH2.3] [F70-OH2.1]

#### **Intent(s)**

*Intent 1.* To limit the probability that an interruption of water and sanitary services to an adjacent building will lead to an interruption of services to the building, which could lead to the unavailability of water for drinking, bathing, washing or flushing of fixtures, which could lead to unsanitary conditions, which could lead to harm to persons.

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### **Provision: 2.1.3.1.(1)**

#### **Objective**

OH1

#### **Attributions**

[F40-OH1.1] Applies to the requirement for ventilation.

#### **Intent(s)**

*Intent 1.* To limit the probability that plumbing fixtures will be installed in locations that do not have sufficient ventilation, which could lead to a negative effect on indoor air quality, which could lead to harm to persons.

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#### **Objective**

OS3

#### **Attributions**

[F30-OS3.1] Applies to the requirement for lighting.

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## **Intent Statements: NPC 2020**

### **Intent(s)**

*Intent 1.* To limit the probability that plumbing fixtures will be installed in locations that do not have sufficient lighting, which could lead to persons tripping, falling or bumping into fixtures, which could lead to harm to persons.

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### **Provision: 2.1.3.2.(1)**

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#### **Objective**

OH2

#### **Attributions**

[F40-OH2.1] [F41-OH2.4] [F71-OH2.3]

### **Intent(s)**

*Intent 1.* To limit the probability that plumbing equipment will be inaccessible for maintenance, which could lead to blockages or failure, which could lead to flooding or leakage, which could lead to unsanitary conditions, which could lead to harm to persons.

*Intent 2.* To limit the probability that plumbing equipment will be inaccessible for cleaning, which could lead to bacteria growth, which could lead to unsanitary conditions, which could lead to harm to persons.

*Intent 3.* To limit the probability that plumbing equipment will be inaccessible, which could lead to unavailability for its intended use, which could lead to unsanitary conditions, which could lead to harm to persons.

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#### **Objective**

OH2

#### **Attributions**

[F82-OH2.1, OH2.2, OH2.3, OH2.4]

### **Intent(s)**

*Intent 1.* To limit the probability that plumbing equipment will be inaccessible for maintenance, which could lead to failure of a trap seal or insufficient venting, which could lead to a negative effect on indoor air quality, which could lead to harm to persons.

---

#### **Objective**

OH2

#### **Attributions**

[F71-OH2.3] [F81-OH2.4]

### **Intent(s)**

*Intent 1.* To limit the probability that plumbing equipment will be inaccessible for use, which could lead to discomfort, which could lead to harm to persons.

*Intent 2.* To limit the probability that plumbing equipment will be inaccessible for maintenance, which could lead to persons coming in contact with damaged equipment [such as sharp edges, cracks, broken or weakened parts], which could lead to harm to persons.

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#### **Objective**

OP5

#### **Attributions**

[F81-OP5]

**Intent(s)**

*Intent 1.* To limit the probability that plumbing equipment will be inaccessible for maintenance, which could lead to blockages or failure, which could lead to leakage or flooding, which could lead to damage to the building or facility.

*Intent 2.* To limit the probability that plumbing equipment will be inaccessible for use, which could lead to delays in accessing system controls such as shut-off and pressure-reducing valves, which could lead to excessive leakage or flooding, which could lead to damage to the building or facility.

**Provision: 2.1.4.1.(1)**

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**Intent(s)**

*Intent 1.* To direct Code users to Subsection 4.1.8. of Division B of the NBC for seismic restraint.

**Objective**

OS2

**Attributions**

[F20-OS2.1]

**Intent(s)**

*Intent 1.* To limit the probability that plumbing system components will not be able to resist the specified earthquake loads, which could lead to such components being damaged, which could lead to their failure or collapse, which could lead to harm to persons.

**Provision: 2.2.1.1.(1)**

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**Objective**

OH2

**Attributions**

[F80-OH2.1, OH2.2, OH2.3, OH2.4]

**Intent(s)**

*Intent 1.* To limit the probability that exposure to corrosive conditions will lead to premature failure of plumbing systems, which could lead to leakage or flooding, which could lead to unsanitary conditions, which could lead to harm to persons.

**Objective**

OP5

**Attributions**

[F80-OP5]

**Intent(s)**

*Intent 1.* To limit the probability that exposure to corrosive conditions will lead to premature failure of plumbing systems, which could lead to leakage or flooding, which could lead to damage to the building or facility.

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## **Intent Statements: NPC 2020**

### **Provision: 2.2.1.1.(2)**

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#### **Objective**

OH2

#### **Attributions**

[F80-OH2.1]

#### **Intent(s)**

*Intent 1.* To limit the probability that exposure to corrosive waste will lead to premature failure of drainage systems, which could lead to persons being exposed to sewer wastes, sewer gases or toxic fumes, which could lead to harm to persons.

---

#### **Objective**

OP5

#### **Attributions**

[F80-OP5]

#### **Intent(s)**

*Intent 1.* To limit the probability that exposure to corrosive waste will lead to premature failure of drainage systems, which could lead to the unwanted escape of waste material, which could lead to damage to the building or facility.

### **Provision: 2.2.1.2.(1)**

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#### **Objective**

OH2

#### **Attributions**

[F70-OH2.2]

#### **Intent(s)**

*Intent 1.* To limit the probability that contaminated materials will be used, which could lead to the contamination of potable water systems, which could lead to harm to persons.

### **Provision: 2.2.1.3.(1)**

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#### **Intent(s)**

*Intent 1.* To facilitate determination of compliance with the Code.

### **Provision: 2.2.1.3.(2)**

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#### **Intent(s)**

*Intent 1.* To facilitate determination of compliance with the Code.

### **Provision: 2.2.1.4.(1)**

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#### **Intent(s)**

*Intent 1.* To clarify that all references to tube and tubing used in a plumbing system have the same meaning as pipe and piping, and are to be treated in the same manner for the purpose of applying the NPC.

**Provision: 2.2.1.5.(1)**

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**Objective**

OH2

**Attributions**

[F20, F81-OH2.1, OH2.3] [F46-OH2.2]

**Intent(s)**

*Intent 1.* To limit the probability that internal pressure will lead to the failure of piping, fittings and joints, which could lead to exposure of persons to sewer waste or gases, which could lead to harm to persons.

---

**Objective**

OP5

**Attributions**

[F20-OP5]

**Intent(s)**

*Intent 1.* To limit the probability that internal pressure will lead to the failure of piping, fittings and joints, which could lead to the leakage of liquids, which could lead to damage to the building or facility.

**Provision: 2.2.1.6.(1)**

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**Objective**

OH2

**Attributions**

[F20, F81-OH2.3]

**Intent(s)**

*Intent 1.* To limit the probability that internal pressure will lead to the failure of water service pipes, which could lead to persons being exposed to water at a high pressure, which could lead to harm to persons.

---

**Objective**

OP5

**Attributions**

[F20-OP5]

**Intent(s)**

*Intent 1.* To limit the probability that internal pressure will lead to the failure of water service pipes, which could lead to the leakage of liquids, which could lead to damage to the building or facility.

**Provision: 2.2.2.1.(1)**

---

**Objective**

OH2

**Attributions**

[F41-OH2.4]

**Intent(s)**

*Intent 1.* To limit the probability that fixture surfaces will be difficult to clean, which could lead to bacteria growth, which could lead to harm to persons.

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## **Intent Statements: NPC 2020**

### **Provision: 2.2.2.2.(1)**

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#### **Objective**

OH2

#### **Attributions**

[F80-OH2.1, OH2.4]

#### **Intent(s)**

*Intent 1.* To limit the probability that plumbing fixtures will not meet proper standards, which could lead to such fixtures not performing in the way intended, which could lead to the failure of such fixtures, which could lead to unsanitary conditions, which could lead to harm to persons.

---

#### **Objective**

OS3

#### **Attributions**

[F80-OS3.1, OS3.2]

#### **Intent(s)**

*Intent 1.* To limit the probability that plumbing fixtures will not meet proper standards, which could lead to such fixtures not performing in the way intended, which could lead to the failure of such fixtures, which could lead to unsafe conditions or exposure to hazards, which could lead to harm to persons.

### **Provision: 2.2.2.3.(1)**

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#### **Objective**

OH2

#### **Attributions**

[F80-OH2.1]

#### **Intent(s)**

*Intent 1.* To limit the probability that water will leak into building components through walls or floors, which could lead to bacteria growth, which could lead to harm to persons.

---

#### **Objective**

OP5

#### **Attributions**

[F80-OP5]

#### **Intent(s)**

*Intent 1.* To limit the probability that water will leak into building components through walls or floors, which could lead to damage to the building or facility.

### **Provision: 2.2.2.3.(2)**

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#### **Objective**

OH2

#### **Attributions**

[F80-OH2.1]

#### **Intent(s)**

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## **Intent Statements: NPC 2020**

*Intent 1.* To limit the probability that an excessive amount of water from shower heads will flow into a drain, which could lead to the drain overflowing, which could lead to water leakage into building components, which could lead to bacteria growth, which could lead to harm to persons.

---

### **Objective**

OP5

### **Attributions**

[F40-OP5]

### **Intent(s)**

*Intent 1.* To limit the probability that an excessive amount of water from shower heads will flow into a drain, which could lead to the drain overflowing, which could lead to water leakage into building components, which could lead to damage to the building or facility.

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### **Provision: 2.2.2.3.(3)**

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### **Objective**

OH2

### **Attributions**

[F45-OH2.1]

### **Intent(s)**

*Intent 1.* To limit the probability that persons will be exposed to waste water from adjacent showers being used by other persons, which could lead to the spread of disease, which could lead to harm to persons.

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### **Provision: 2.2.2.3.(4)**

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### **Objective**

OH2

### **Attributions**

[F45-OH2.1]

### **Intent(s)**

*Intent 1.* To limit the probability that persons will be exposed to waste water from adjacent showers being used by other persons, which could lead to the spread of disease, which could lead to harm to persons.

---

### **Intent(s)**

*Intent 1.* To exempt column showers from the minimum horizontal distance requirements of Sentence 2.2.2.3.(4) since the inherent circular installation of the heads [on the column] will maintain spray separation.

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### **Provision: 2.2.2.4.(1)**

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### **Objective**

OH2

### **Attributions**

[F41, F81-OH2.1, OH2.4]

### **Intent(s)**

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## **Intent Statements: NPC 2020**

*Intent 1.* To limit the probability that contaminated overflows [from food debris] will not be identified, cleaned and disinfected, which could lead to the contamination of food and utensils, which could lead to harm to persons.

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### **Provision: 2.2.2.5.(1)**

#### **Objective**

OH2

#### **Attributions**

[F30-OH2.1, OH2.4]

#### **Intent(s)**

*Intent 1.* To limit the probability that persons using the fixture will contact the contaminated front of the fixture, which could lead to the spread of disease, which could lead to harm to persons.

---

### **Provision: 2.2.3.1.(1)**

#### **Objective**

OH1

#### **Attributions**

[F81, F40-OH1.1]

#### **Intent(s)**

*Intent 1.* To limit the probability that inertia of the water flow [pressure differential] and evaporation, or malfunction of mechanical devices, will lead to the failure of trap seals, which could lead to the leakage of sewer gases into the building, which could lead to a negative effect on indoor air quality, which could lead to harm to persons.

*Intent 2.* To limit the probability that leakage from the failure of trap seals will not be identified and corrected, which could lead to the leakage of sewer gases into the building, which could lead to a negative effect on indoor air quality, which could lead to harm to persons.

---

### **Provision: 2.2.3.1.(2)**

#### **Objective**

OH1

#### **Attributions**

[F81-OH1.1]

#### **Intent(s)**

*Intent 1.* To modify the requirements of Sentence 2.2.3.1.(1) [specifically Clause 2.2.3.1.(1)(a)], which would otherwise permit a lesser depth, on the basis that a greater minimum trap seal depth will provide additional protection where exposure to acid gases is possible in an acid waste system.

This [greater seal depth] is to limit the probability that inertia of the water flow [pressure differential] and evaporation, or malfunction of mechanical devices, will lead to the failure of trap seals, which could lead to the leakage of sewer gases into the building, which could lead to a negative effect on indoor air quality, which could lead to harm to persons.

---

**Objective**

OP5

**Attributions**

[F81-OP5]

**Intent(s)**

*Intent 1.* To modify the requirements of Sentence 2.2.3.1.(1) [specifically Clause 2.2.3.1.(1)(a)], which would otherwise permit a lesser depth, on the basis that a greater minimum trap seal depth will provide additional protection where exposure to acid gases is possible in an acid waste system.

This [greater seal depth] is to limit the probability that inertia of the water flow [pressure differential] and evaporation, or malfunction of mechanical devices, will lead to the failure of trap seals, which could lead to the leakage of sewer gases into the building, which could lead to damage to the building or facilities.

**Provision: 2.2.3.1.(3)**

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**Objective**

OH2

**Attributions**

[F81-OH2.1, OH2.3, OH2.4]

**Intent(s)**

*Intent 1.* To limit the probability that traps will not be cleaned, which could lead to the accumulation of solids in the trap, which could lead to blockage of the trap, which could lead to waste water backing up, overflowing and flooding, which could lead to unsanitary conditions, which could lead to harm to persons.

---

**Objective**

OP5

**Attributions**

[F81-OP5]

**Intent(s)**

*Intent 1.* To limit the probability that traps will not be cleaned, which could lead to the accumulation of solids in the trap, which could lead to blockage of the trap, which could lead to overflowing and flooding, which could lead to damage to the building or facility.

---

**Intent(s)**

*Intent 1.* To exempt from the requirement for a cleanout plug at the lowest point of the trap where the configuration of the floor-mounted sink makes access to the cleanout plug impractical.

**Provision: 2.2.3.1.(4)**

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**Objective**

OH1

**Attributions**

[F81-OH1.1]

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## **Intent Statements: NPC 2020**

### **Intent(s)**

*Intent 1.* To limit the probability that traps will not be properly sealed, which could lead to the leakage of sewer gases into the building, which could lead to harm to persons.

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### **Provision: 2.2.3.1.(5)**

#### **Objective**

OH1

#### **Attributions**

[F81-OH1.1]

### **Intent(s)**

*Intent 1.* To limit the probability that leakage from drum trap seals will not be identified and corrected, which could lead to the leakage of sewer gases into the building, which could lead to a negative effect on indoor air quality, which could lead to harm to persons.

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### **Provision: 2.2.3.2.(1)**

#### **Objective**

OH2

#### **Attributions**

[F81-OH2.1, OH2.3, OH2.4]

### **Intent(s)**

*Intent 1.* To limit the probability that interceptors will not be cleaned, which could lead to the accumulation of material in the interceptor, which could lead to the blockage of flow or the failure to intercept waste materials, which could lead to waste water backing up, which could lead to unsanitary conditions, which could lead to harm to persons.

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### **Provision: 2.2.3.2.(2)**

#### **Objective**

OH2

#### **Attributions**

[F81-OH2.1, OH2.3, OH2.4] [F46-OH2.2]

### **Intent(s)**

*Intent 1.* To limit the probability that inadequate design will lead to air binding of grease interceptors, which could lead to a buildup of waste gas pressure, which could lead to the blockage of waste flow, which could lead to sewage backing up, which could lead to unsanitary conditions, which could lead to harm to persons.

*Intent 2.* To limit the probability that installation of grease interceptors with a water jacket will lead to, if a crack develops in the wall between the interceptor and the water jacket, contamination of potable water, which could lead to harm to persons.

**Provision: 2.2.3.2.(3)**

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**Objective**

OH2

**Attributions**

[F81-OH2.1]

**Intent(s)**

*Intent 1.* To limit the probability that the performance of grease interceptors will fall significantly below expectations, which could lead to the contents of such interceptors emptying into drainage system where they might congeal or solidify, which could lead to blockage of the drainage system, which could lead to sewage backing up, which could lead to unsanitary conditions, which could lead to harm to persons.

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**Objective**

OP5

**Attributions**

[F81-OP5]

**Intent(s)**

*Intent 1.* To limit the probability that the performance of grease interceptors will fall significantly below expectations, which could lead to the contents of such interceptors emptying into drainage system where they might congeal or solidify, which could lead to blockage of the drainage system, which could lead to sewage backing up, which could lead to damage to the building or facility.

**Provision: 2.2.3.3.(1)**

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**Objective**

OH2

**Attributions**

[F82-OH2.1, OH2.4]

**Intent(s)**

*Intent 1.* To limit the probability that the failure of less robust traps will not be detected and corrected, which could lead to the leakage of sewage, which could lead to unsanitary conditions, which could lead to harm to persons.

*Intent 2.* To limit the probability that a lack of accessibility will lead to tubular metal or plastic traps not being cleaned, which could lead to the accumulation of solids in the trap, which could lead to waste water backing up, overflowing and flooding, which could lead to unsanitary conditions, which could lead to harm to persons.

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**Objective**

OP5

**Attributions**

[F82-OP5]

**Intent(s)**

*Intent 1.* To limit the probability that the failure of less robust traps will not be detected and corrected, which could lead to the leakage of sewage, which could lead to damage to the building or facility.

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## **Intent Statements: NPC 2020**

### **Provision: 2.2.4.1.(1)**

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#### **Objective**

OH2

#### **Attributions**

[F81-OH2.1, OH2.4]

#### **Intent(s)**

*Intent 1.* To limit the probability that turbulence at an abrupt change in flow direction will lead to a reduction of flow capacity of drainage systems, which could lead to waste water backing up, which could lead to unsanitary conditions, which could lead to harm to persons.

### **Provision: 2.2.4.1.(2)**

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#### **Objective**

OH2

#### **Attributions**

[F81-OH2.1, OH2.4]

#### **Intent(s)**

*Intent 1.* To limit the probability that turbulence and interference between flows from opposite branches will lead to a reduction of flow capacity in drainage systems, which could lead to waste water backing up, which could lead to unsanitary conditions, which could lead to harm to persons.

### **Provision: 2.2.4.2.(1)**

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#### **Objective**

OH2

#### **Attributions**

[F81-OH2.1, OH2.4]

#### **Intent(s)**

*Intent 1.* To limit the probability that turbulence and interference between flows from opposite branches will lead to a reduction of flow capacity in drainage systems, which could lead to waste water backing up, which could lead to unsanitary conditions, which could lead to harm to persons.

### **Provision: 2.2.4.2.(2)**

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#### **Objective**

OH2

#### **Attributions**

[F81-OH2.1, OH2.4]

#### **Intent(s)**

*Intent 1.* To limit the probability that discharge from one water closet will enter another water closet, which could lead to flooding and overflow, which could lead to unsanitary conditions, which could lead to harm to persons.

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## **Intent Statements: NPC 2020**

*Intent 2.* To limit the probability that blockages in water closet or urinal drainage systems will be difficult to clear or clean out using drain-cleaning equipment, which could lead to flooding and overflow, which could lead to unsanitary conditions, which could lead to harm to persons.

---

### **Objective**

OP5

### **Attributions**

[F81-OP5]

### **Intent(s)**

*Intent 1.* To limit the probability that discharge from one water closet will enter another water closet, which could lead to flooding and overflow, which could lead to damage to the building or facility.

*Intent 2.* To limit the probability that blockages in water closet or urinal drainage systems will be difficult to clear or clean out using drain-cleaning equipment, which could lead to flooding and overflow, which could lead to damage to the building or facility.

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### **Provision: 2.2.4.3.(1)**

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### **Objective**

OH2

### **Attributions**

[F81-OH2.1, OH2.4]

### **Intent(s)**

*Intent 1.* To limit the probability that waste water flow will be subjected to abrupt changes in direction, which could lead to turbulence, which could lead to blockages or inadequate flow capacity, which could lead to waste water backing up, which could lead to unsanitary conditions, which could lead to harm to persons.

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### **Provision: 2.2.4.3.(2)**

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### **Objective**

OH2

### **Attributions**

[F81-OH2.1, OH2.4]

### **Intent(s)**

*Intent 1.* To limit the probability that waste water flow will be subjected to abrupt changes in direction, which could lead to turbulence, which could lead to blockages or inadequate flow capacity, which could lead to waste water backing up, which could lead to unsanitary conditions, which could lead to harm to persons.

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### **Provision: 2.2.5.1.(1)**

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### **Objective**

OH2

### **Attributions**

[F20-OH2.1]

### **Intent(s)**

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## **Intent Statements: NPC 2020**

*Intent 1.* To limit the probability that the performance of fibrocement pipe and fittings will fall significantly below expectations, which could lead to the failure of such pipe or fittings, which could lead to unsanitary conditions, which could lead to harm to persons.

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### **Objective**

OP5

### **Attributions**

[F20-OP5]

### **Intent(s)**

*Intent 1.* To limit the probability that fibrocement pipe and fittings will be subject to mechanical or physical damage, which could lead to the failure of such pipe or fittings, which could lead to leakage or flooding, which could lead to damage to the building or facility.

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## **Provision: 2.2.5.2.(1)**

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### **Objective**

OH2

### **Attributions**

[F20-OH2.1]

### **Intent(s)**

*Intent 1.* To limit the probability that concrete pipe will not meet proper standards, which could lead to such pipe not performing in the way intended, which could lead to the failure of such pipe, which could lead to the leakage of sewage, which could lead to unsanitary conditions, which could lead to harm to persons.

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## **Provision: 2.2.5.2.(2)**

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### **Objective**

OH2

### **Attributions**

[F20-OH2.1]

### **Intent(s)**

*Intent 1.* To limit the probability that joints with internal elastomeric gaskets will not meet proper standards, which could lead to such joints not performing in the way intended, which could lead to the failure of such joints, which could lead to the leakage of sewage, which could lead to unsanitary conditions, which could lead to harm to persons.

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## **Provision: 2.2.5.2.(3)**

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### **Objective**

OH2

### **Attributions**

[F20-OH2.1]

### **Intent(s)**

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## **Intent Statements: NPC 2020**

*Intent 1.* To limit the probability that field-fabricated concrete fittings will be used, which could lead to the failure of such fittings, which could lead to the leakage of sewage, which could lead to unsanitary conditions, which could lead to harm to persons.

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### **Provision: 2.2.5.2.(4)**

#### **Objective**

OH2

#### **Attributions**

[F20-OH2.1]

#### **Intent(s)**

*Intent 1.* To limit the probability that concrete pipe will not be continuously supported, which could lead to the leakage of sewage from joints caused by normal expansion and contraction, which could lead to unsanitary conditions, which could lead to harm to persons.

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### **Provision: 2.2.5.2.(5)**

#### **Objective**

OH2

#### **Attributions**

[F20-OH2.1]

#### **Intent(s)**

*Intent 1.* To limit the probability that the performance of precast reinforced circular concrete manhole sections, catch basins and fittings will fall significantly below expectations, which could lead to the failure of such sections, basins or fittings, which could lead to the leakage of sewage, which could lead to unsanitary conditions, which could lead to harm to persons.

---

### **Provision: 2.2.5.3.(1)**

#### **Objective**

OH2

#### **Attributions**

[F20-OH2.1]

#### **Intent(s)**

*Intent 1.* To limit the probability that the performance of vitrified clay pipe and fittings will fall significantly below expectations, which could lead to the failure of such pipe or fittings, which could lead to the leakage of sewage, which could lead to unsanitary conditions, which could lead to harm to persons.

---

### **Provision: 2.2.5.3.(2)**

#### **Objective**

OH2

#### **Attributions**

[F20-OH2.1]

#### **Intent(s)**

---

## **Intent Statements: NPC 2020**

*Intent 1.* To limit the probability that the performance of couplings and joints for vitrified clay pipe will fall significantly below expectations, which could lead to the failure of such couplings or joints, which could lead to the leakage of sewage, which could lead to unsanitary conditions, which could lead to harm to persons.

---

### **Provision: 2.2.5.3.(3)**

#### **Objective**

OH2

#### **Attributions**

[F20-OH2.1]

#### **Intent(s)**

*Intent 1.* To limit the probability that vitrified clay pipe and fittings will be used above ground or inside buildings where they may be subject to mechanical damage, which could lead to leakage or flooding, which could lead to unsanitary conditions, which could lead to harm to persons.

---

### **Provision: 2.2.5.4.(1)**

#### **Objective**

OH2

#### **Attributions**

[F20-OH2.1, OH2.2, OH2.3]

#### **Intent(s)**

*Intent 1.* To limit the probability that the performance of polyethylene water pipe, tubing and fittings will fall significantly below expectations, which could lead to the failure of such pipe, tubing or fittings, which could lead to unsanitary conditions, which could lead to harm to persons.

---

#### **Objective**

OP5

#### **Attributions**

[F20-OP5]

#### **Intent(s)**

*Intent 1.* To limit the probability that the performance of polyethylene water pipe, tubing and fittings will fall significantly below expectations, which could lead to the failure of such pipe, tubing or fittings, which could lead to leakage, which could lead to damage to the building or facility.

---

### **Provision: 2.2.5.4.(2)**

#### **Objective**

OP5

#### **Attributions**

[F20-OP5]

#### **Intent(s)**

*Intent 1.* To limit the probability that polyethylene water pipe [and associated fittings] will be used for a purpose other than as a water service pipe [e.g. hot water service], which could lead to the failure of

such pipe or fittings due to the inability of the pipe material to withstand service conditions, which could lead to leakage or flooding, which could lead to damage to the building or facility.

**Provision: 2.2.5.4.(3)**

---

**Objective**

OP5

**Attributions**

[F20-OP5]

**Intent(s)**

*Intent 1.* To limit the probability that butt fusion fittings for polyethylene pipe will not meet proper standards, which could lead to the failure of such fittings, which could lead to leakage or flooding, which could lead to damage to the building or facility.

**Provision: 2.2.5.5.(1)**

---

**Objective**

OH2

**Attributions**

[F72-OH2.1, OH2.3]

**Intent(s)**

*Intent 1.* To limit the probability that the performance of polyethylene pipe will fall significantly below expectations, which could lead to the failure of such pipe, which could lead to leakage, which could lead to unsanitary conditions, which could lead to harm to persons.

**Provision: 2.2.5.6.(1)**

---

**Objective**

OH2

**Attributions**

[F20-OH2.2]

**Intent(s)**

*Intent 1.* To limit the probability that the performance of crosslinked polyethylene pipe and manufacturer-approved fittings will fall significantly below expectations, which could lead to the failure of such pipe and fittings, which could lead to contamination of potable water, which could lead to harm to persons.

---

**Objective**

OP5

**Attributions**

[F20-OP5]

**Intent(s)**

*Intent 1.* To limit the probability that the performance of crosslinked polyethylene pipe and manufacturer-approved fittings will fall significantly below expectations, which could lead to the failure of such pipe or fittings, which could lead to leakage or flooding, which could lead to damage to the building or facility.

---

## **Intent Statements: NPC 2020**

### **Provision: 2.2.5.7.(1)**

---

#### **Objective**

OH2

#### **Attributions**

[F20-OH2.1, OH2.2, OH2.3]

#### **Intent(s)**

*Intent 1.* To limit the probability that PVC water pipe, fittings and solvent cement will not meet proper standards, which could lead to such pipe, fittings or cement not performing in the way intended, which could lead to the failure of such pipe, fittings or cement, which could lead to unsanitary conditions, which could lead to harm to persons.

---

#### **Objective**

OP5

#### **Attributions**

[F20-OP5]

#### **Intent(s)**

*Intent 1.* To limit the probability that PVC water pipe, fittings and solvent cement will not meet proper standards, which could lead to such pipe, fittings or cement not performing in the way intended, which could lead to the failure of such pipe, fittings or cement, which could lead to leakage or flooding, which could lead to damage to the building or facility.

*Intent 2.* To limit the probability that normal operating pressures will lead to the failure of the PVC water pipe, fittings or solvent cement, which could lead to leakage or flooding, which could lead to damage to the building or facility.

### **Provision: 2.2.5.7.(2)**

---

#### **Objective**

OH2

#### **Attributions**

[F20-OH2.1, OH2.2, OH2.3]

#### **Intent(s)**

*Intent 1.* To limit the probability that PVC water pipe fittings will not meet proper standards, which could lead to such fittings not performing in the way intended, which could lead to the failure of such fittings, which could lead to unsanitary conditions, which could lead to harm to persons.

---

#### **Objective**

OP5

#### **Attributions**

[F20-OP5]

#### **Intent(s)**

*Intent 1.* To limit the probability that PVC water pipe fittings will not meet proper standards, which could lead to such fittings not performing in the way intended, which could lead to the failure of such fittings, which could lead to leakage or flooding, which could lead to damage to the building or facility.

**Provision: 2.2.5.7.(3)**

---

**Objective**

OH2

**Attributions**

[F20-OH2.1, OH2.2, OH2.3]

**Intent(s)**

*Intent 1.* To limit the probability that PVC injection-moulded gasketed fittings will not meet proper standards, which could lead to such fittings not performing in the way intended, which could lead to the failure of such fittings, which could lead to leakage, which could lead to unsanitary conditions, which could lead to harm to persons.

---

**Objective**

OP5

**Attributions**

[F20-OP5]

**Intent(s)**

*Intent 1.* To limit the probability that PVC injection-moulded gasketed fittings will not meet proper standards, which could lead to such fittings not performing in the way intended, which could lead to the failure of such fittings, which could lead to leakage or flooding, which could lead to damage to the building or facility.

**Provision: 2.2.5.7.(4)**

---

**Objective**

OP5

**Attributions**

[F20-OP5]

**Intent(s)**

*Intent 1.* To limit the probability that temperatures from hot water will soften and weaken pipe or fitting materials, which could lead to the failure of such pipe or fittings, which could lead to leakage or flooding, which could lead to damage to the building or facility.

**Provision: 2.2.5.8.(1)**

---

**Objective**

OH2

**Attributions**

[F20-OH2.2, OH2.3, OH2.4]

**Intent(s)**

*Intent 1.* To limit the probability that CPVC hot and cold water pipe, fittings and solvent cements will not meet proper standards, which could lead to such pipe, fittings or cements not performing in the way intended, which could lead to the failure of such pipe, fittings or cements, which could lead to unsanitary conditions, which could lead to harm to persons.

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## **Intent Statements: NPC 2020**

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### **Objective**

OP5

### **Attributions**

[F20-OP5]

### **Intent(s)**

*Intent 1.* To limit the probability that CPVC hot and cold water pipe, fittings and solvent cements will not meet proper standards, which could lead to such pipe, fittings or cements not performing in the way intended, which could lead to the failure of such pipe, fittings or cements, which could lead to leakage or flooding, which could lead to damage to the building or facility.

---

### **Provision: 2.2.5.8.(2)**

---

### **Objective**

OP5

### **Attributions**

[F20-OP5]

### **Intent(s)**

*Intent 1.* To limit the probability that normal operating temperatures and pressures will lead to the failure of CPVC piping systems, which could lead to leakage or flooding, which could lead to damage to the building or facility.

---

### **Provision: 2.2.5.9.(1)**

---

### **Objective**

OH2

### **Attributions**

[F20, F80, F81-OH2.1]

### **Intent(s)**

*Intent 1.* To limit the probability that the performance of plastic pipe, fittings and solvent cement used underground outside a building or under a building in a drainage system will fall significantly below expectations, which could lead to the deterioration of such pipe, fittings or cement from expected service conditions, which could lead to the failure of such pipe, fittings or cement, which could lead to leakage, which could lead to unsanitary conditions, which could lead to harm to persons.

---

### **Objective**

OP5

### **Attributions**

[F20, F80, F81-OP5]

### **Intent(s)**

*Intent 1.* To limit the probability that the performance of plastic pipe, fittings and solvent cement used underground outside a building or under a building in a drainage system will fall significantly below expectations, which could lead to the deterioration of such pipe, fittings or cement from expected service conditions, which could lead to the failure of such pipe, fittings or cement, which could lead to leakage, which could lead to damage to the building or facility.

**Provision: 2.2.5.10.(1)**

---

**Objective**

OH2

**Attributions**

[F20, F80, F81-OH2.1, OH2.3]

**Intent(s)**

*Intent 1.* To limit the probability that the performance of solvent cement will fall significantly below expectations, which could lead to the failure of such cement, which could lead to leakage, which could lead to unsanitary conditions, which could lead to harm to persons.

**Provision: 2.2.5.10.(2)**

---

**Objective**

OH2

**Attributions**

[F20, F80, F81-OH2.1, OH2.3]

**Intent(s)**

*Intent 1.* To limit the probability that an inappropriate cement will be used, which could lead to joint failure, which could lead to leakage, which could lead to unsanitary conditions, which could lead to harm to persons.

**Provision: 2.2.5.11.(1)**

---

**Objective**

OH2

**Attributions**

[F20, F80, F81-OH2.1, OH2.3]

**Intent(s)**

*Intent 1.* To limit the probability that the performance of plastic pipe, fittings and solvent cement will fall significantly below expectations, which could lead to the failure of such pipe, fittings or cement, which could lead to unsanitary conditions, which could lead to harm to persons.

**Provision: 2.2.5.11.(2)**

---

**Intent(s)**

*Intent 1.* To direct Code users to fire safety requirements in the NBC for combustible piping materials.

**Provision: 2.2.5.11.(3)**

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**Intent(s)**

*Intent 1.* To direct Code users to fire safety requirements referenced in the NBC for noncombustible piping materials penetrating fire separations or fire stops.

---

## **Intent Statements: NPC 2020**

### **Provision: 2.2.5.12.(1)**

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#### **Objective**

OH2

#### **Attributions**

[F20, F80, F81-OH2.1, OH2.2, OH2.3]

#### **Intent(s)**

*Intent 1.* To limit the probability that the performance of PE/AL/PE composite pipe and fittings will fall significantly below expectations, which could lead to the failure of such pipe or fittings, which could lead to leakage, which could lead to unsanitary conditions, which could lead to harm to persons.

---

#### **Objective**

OP5

#### **Attributions**

[F20-OP5]

#### **Intent(s)**

*Intent 1.* To limit the probability that the performance of PE/AL/PE composite pipe and fittings will fall significantly below expectations, which could lead to the failure of such pipe or fittings, which could lead to leakage, which could lead to damage to the building or facility.

### **Provision: 2.2.5.12.(2)**

---

#### **Objective**

OP5

#### **Attributions**

[F20-OP5]

#### **Intent(s)**

*Intent 1.* To limit the probability that the use of materials that are unable to meet high-temperature service conditions will lead to the failure of pipes and fittings, which could lead to leakage, which could lead to damage to the building or facility.

---

#### **Objective**

OH2

#### **Attributions**

[F20-OH2.1, OH2.2, OH2.3]

#### **Intent(s)**

*Intent 1.* To limit the probability that the use of materials that are unable to meet high-temperature service conditions will lead to the failure of pipes and fittings, which could lead to leakage, which could lead to unsanitary conditions, which could lead to harm to persons.

**Provision: 2.2.5.12.(3)**

---

**Objective**

OP5

**Attributions**

[F20-OP5]

**Intent(s)**

*Intent 1.* To limit the probability that the performance of the PE/AL/PE pipe will fall significantly below expectations, which could lead to the failure of such pipe, which could lead to leakage, which could lead to damage to the building or facility.

---

**Objective**

OH2

**Attributions**

[F20-OH2.1, OH2.2, OH2.3]

**Intent(s)**

*Intent 1.* To limit the probability that the performance of the PE/AL/PE pipe will fall significantly below expectations, which could lead to the failure of such pipe, which could lead to leakage, which could lead to unsanitary conditions, which could lead to harm to persons.

**Provision: 2.2.5.12.(4)**

---

**Objective**

OP5

**Attributions**

[F20-OP5]

**Intent(s)**

*Intent 1.* To limit the probability that the performance of fittings used with PE/AL/PE composite pipe will fall significantly below expectations, which could lead to the failure of such fittings, which could lead to leakage, which could lead to damage to the building or facility.

---

**Objective**

OH2

**Attributions**

[F20-OH2.1, OH2.2, OH2.3]

**Intent(s)**

*Intent 1.* To limit the probability that the performance of fittings used with PE/AL/PE composite pipe will fall significantly below expectations, which could lead to the failure of such fittings, which could lead to leakage, which could lead to unsanitary conditions, which could lead to harm to persons.

---

## **Intent Statements: NPC 2020**

### **Provision: 2.2.5.13.(1)**

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#### **Objective**

OH2

#### **Attributions**

[F20-OH2.1, OH2.2, OH2.3]

#### **Intent(s)**

*Intent 1.* To limit the probability that the performance of the PEX/AL/PEX composite pipe and fittings will fall significantly below expectations, which could lead to the failure of such pipe or fittings, which could lead to leakage, which could lead to unsanitary conditions, which could lead to harm to persons.

---

#### **Objective**

OP5

#### **Attributions**

[F20-OP5]

#### **Intent(s)**

*Intent 1.* To limit the probability that the performance of the PEX/AL/PEX composite pipe and fittings will fall significantly below expectations, which could lead to the failure of such pipe or fittings, which could lead to leakage, which could lead to damage to the building or facility.

### **Provision: 2.2.5.14.(1)**

---

#### **Objective**

OH2

#### **Attributions**

[F20-OH2.1, OH2.2, OH2.3]

#### **Intent(s)**

*Intent 1.* To limit the probability that the performance of polypropylene pipe and fittings will fall significantly below expectations, which could lead to the failure of such pipe or fittings, which could lead to leakage, which could lead to unsanitary conditions, which could lead to harm to persons.

---

#### **Objective**

OP5

#### **Attributions**

[F20-OP5]

#### **Intent(s)**

*Intent 1.* To limit the probability that the performance of polypropylene pipe and fittings will fall significantly below expectations, which could lead to the failure of such pipe or fittings, which could lead to leakage, which could lead to damage to the building or facility.

**Provision: 2.2.5.15.(1)**

---

**Objective**

OH2

**Attributions**

[F20, F70, F80-OH2.2]

**Intent(s)**

*Intent 1.* To limit the probability that the performance of PE-RT tube and manufacturer-approved fittings will fall significantly below expectations, which could lead to the failure of such tube or fittings, which could lead to degradation of the tube or fittings, which could lead to contamination of the potable water, which could lead to harm to persons.

---

**Objective**

OP5

**Attributions**

[F20, F70, F80-OP5]

**Intent(s)**

*Intent 1.* To limit the probability that PE-RT tube and manufacturer-approved fittings will not be able to withstand the necessary operating pressures and temperatures, which could lead to the failure of such tube or fittings, which could lead to leakage of the potable water, which could lead to damage to the building or facility.

---

**Provision: 2.2.5.15.(2)**

---

**Objective**

OH2

**Attributions**

[F80, F81-OH2.1]

**Intent(s)**

*Intent 1.* To limit the probability that PE-RT tube will be used in an unsuitable application, which could lead to excessive wear, which could lead to the accumulation of waste, which could lead to sewage backup, which could lead to unsanitary conditions, which could lead to harm to persons.

---

**Objective**

OP5

**Attributions**

[F20, F70, F80-OP5]

**Intent(s)**

*Intent 1.* To limit the probability that PE-RT tube will be used in an unsuitable application, which could lead to excessive wear, which could lead to the accumulation of waste, which could lead to sewage backup, which could lead to damage to the building or facility.

---

## **Intent Statements: NPC 2020**

### **Provision: 2.2.5.16.(1)**

---

#### **Objective**

OH2

#### **Attributions**

[F20-OH2.1, OH2.2, OH2.3]

#### **Intent(s)**

*Intent 1.* To limit the probability that the performance of cellular core PVC pipe will fall significantly below expectations, which could lead to the failure of such pipe, which could lead to leakage, which could lead to unsanitary conditions, which could lead to harm to persons.

---

#### **Objective**

OP5

#### **Attributions**

[F20-OP5]

#### **Intent(s)**

*Intent 1.* To limit the probability that the performance of cellular core PVC pipe will fall significantly below expectations, which could lead to the failure of such pipe, which could lead to leakage, which could lead to damage to the building or facility.

### **Provision: 2.2.5.16.(2)**

---

#### **Objective**

OH2

#### **Attributions**

[F20-OH2.1]

#### **Intent(s)**

*Intent 1.* To limit the probability that the performance of fittings and solvent cements for cellular core PVC pipe will fall significantly below expectations, which could lead to the failure of such fittings or cements, which could lead to leakage, which could lead to unsanitary conditions, which could lead to harm to persons.

---

#### **Objective**

OP5

#### **Attributions**

[F20-OP5]

#### **Intent(s)**

*Intent 1.* To limit the probability that the performance of fittings and solvent cements for cellular core PVC pipe will fall significantly below expectations, which could lead to the failure of such fittings or cements, which could lead to leakage, which could lead to damage to the building or facility.

### **Provision: 2.2.5.16.(3)**

---

#### **Intent(s)**

---

## **Intent Statements: NPC 2020**

*Intent 1.* To limit the application of cellular core PVC pipe to small buildings of residential occupancy, on the basis that cellular core PVC pipe will meet the performance expectations for small buildings of residential occupancy.

---

### **Provision: 2.2.6.1.(1)**

#### **Objective**

OH2

#### **Attributions**

[F20-OH2.1, OH2.3]

#### **Intent(s)**

*Intent 1.* To limit the probability that the performance of drainage piping, vent piping and fittings will fall significantly below expectations, which could lead to the failure of such piping or fittings, which could lead to unsanitary conditions, which could lead to harm to persons.

---

### **Provision: 2.2.6.1.(2)**

#### **Objective**

OH2

#### **Attributions**

[F20-OH2.2]

#### **Intent(s)**

*Intent 1.* To limit the probability that use of inappropriate materials for expected service conditions will lead to corrosion, which could lead to contamination of water, which could lead to harm to persons.

---

### **Provision: 2.2.6.2.(1)**

#### **Objective**

OH1

#### **Attributions**

[F81-OH1.1]

#### **Intent(s)**

*Intent 1.* To limit the probability that the performance of cast-iron frames and covers for maintenance holes and catch basins will fall significantly below expectations with regard to airtightness, which could lead to the entry of sewer gases into occupied space, which could lead to negative effects on indoor air quality, which could lead to harm to persons.

---

#### **Objective**

OS3

#### **Attributions**

[F20-OS3.1]

#### **Intent(s)**

*Intent 1.* To limit the probability that the performance of cast-iron frames and covers for maintenance holes and catch basins will fall significantly below expectations when exposed to expected loads and forces, which could lead to the failure of such frames or covers, which could lead to a falling or tripping hazard, which could lead to harm to persons.

---

## **Intent Statements: NPC 2020**

### **Provision: 2.2.6.3.(1)**

---

#### **Objective**

OH2

#### **Attributions**

[F20-OH2.1, OH2.3]

#### **Intent(s)**

*Intent 1.* To limit the probability that the performance of threaded cast-iron drainage fittings will fall significantly below expectations, which could lead to the failure of such fittings, which could lead to leakage, which could lead to unsanitary conditions, which could lead to harm to persons.

### **Provision: 2.2.6.3.(2)**

---

#### **Objective**

OP5

#### **Attributions**

[F20-OP5]

#### **Intent(s)**

*Intent 1.* To limit the probability that inappropriate fittings will lead to an inability to resist expected water pressures, which could lead to leakage, which could lead to flooding, which could lead to damage to the building or facility.

### **Provision: 2.2.6.4.(1)**

---

#### **Objective**

OP5

#### **Attributions**

[F20-OP5]

#### **Intent(s)**

*Intent 1.* To limit the probability that the performance of cast-iron water pipes will fall significantly below expectations, which could lead to the failure of such pipes, which could lead to leakage, which could lead to damage to the building or facility.

---

#### **Objective**

OH2

#### **Attributions**

[F20-OH2.1, OH2.2, OH2.3]

#### **Intent(s)**

*Intent 1.* To limit the probability that the performance of cast-iron water pipes will fall significantly below expectations, which could lead to the failure of such pipes, which could lead to leakage, which could lead to unsanitary conditions, which could lead to harm to persons.

**Provision: 2.2.6.4.(2)**

---

**Objective**

OH2

**Attributions**

[F80-OH2.2]

**Intent(s)**

*Intent 1.* To limit the probability that the performance of cement mortar lining for cast-iron water pipes will fall significantly below expectations, which could lead to corrosion of the cast-iron pipe, which could lead to contamination of water, which could lead to harm to persons.

**Provision: 2.2.6.4.(3)**

---

**Objective**

OP5

**Attributions**

[F20-OP5]

**Intent(s)**

*Intent 1.* To limit the probability that the performance of cast-iron fittings for cast-iron or ductile-iron water pipes will fall significantly below expectations, which could lead to the failure of such fittings, which could lead to leakage, which could lead to damage to the building or facility.

**Provision: 2.2.6.4.(4)**

---

**Objective**

OP5

**Attributions**

[F20-OP5]

**Intent(s)**

*Intent 1.* To limit the probability that the performance of rubber gasket joints for cast-iron and ductile-iron pressure pipes for water will fall significantly below expectations, which could lead to the failure of such joints, which could lead to leakage, which could lead to damage to the building or facility.

**Provision: 2.2.6.5.(1)**

---

**Objective**

OP5

**Attributions**

[F20-OP5]

**Intent(s)**

*Intent 1.* To limit the probability that the performance of screwed cast-iron water fittings will fall significantly below expectations, which could lead to the failure of such fittings, which could lead to leakage, which could lead to damage to the building or facility.

---

## **Intent Statements: NPC 2020**

### **Provision: 2.2.6.5.(2)**

---

#### **Objective**

OH2

#### **Attributions**

[F80-OH2.2]

#### **Intent(s)**

*Intent 1.* To limit the probability that inadequate corrosion protection will lead to the inability of cast-iron fittings to resist the corrosive effects of water, which could lead to contamination of water, which could lead to harm to persons.

### **Provision: 2.2.6.5.(3)**

---

#### **Objective**

OH2

#### **Attributions**

[F81-OH2.1, OH2.3]

#### **Intent(s)**

*Intent 1.* To limit the probability that the use of fittings that are dimensionally incompatible with recognized drainage system jointing methods will lead to a blockage of flow, which could lead to sewage backing up, which could lead to unsanitary conditions, which could lead to harm to persons.

### **Provision: 2.2.6.6.(1)**

---

#### **Objective**

OP5

#### **Attributions**

[F81-OP5]

#### **Intent(s)**

*Intent 1.* To limit the probability that the performance of screwed malleable-iron water fittings will fall significantly below expectations, which could lead to the failure of such fittings, which could lead to leakage, which could lead to damage to the building or facility.

### **Provision: 2.2.6.6.(2)**

---

#### **Objective**

OH2

#### **Attributions**

[F80-OH2.2]

#### **Intent(s)**

*Intent 1.* To limit the probability that inadequate corrosion protection will lead to the inability of cast-iron fittings to resist the corrosive effects of water, which could lead to contamination of water, which could lead to harm to persons.

**Provision: 2.2.6.6.(3)**

---

**Objective**

OH2

**Attributions**

[F81-OH2.1, OH2.3]

**Intent(s)**

*Intent 1.* To limit the probability that the use of fittings that are dimensionally incompatible with recognized drainage system jointing methods will lead to a blockage of flow, which could lead to sewage backing up, which could lead to unsanitary conditions, which could lead to harm to persons.

**Provision: 2.2.6.7.(1)**

---

**Objective**

OH2

**Attributions**

[F80-OH2.1, OH2.3] [F46-OH2.2]

**Intent(s)**

*Intent 1.* To limit the probability of exposure of bare steel pipe surfaces to a combination of water and air, which could lead to corrosion, which could lead to:

- for drainage systems, leakage, or
- for water systems, contamination of water.

This is to limit the probability of unsanitary conditions, which could lead to harm to persons.

**Provision: 2.2.6.7.(2)**

---

**Intent(s)**

*Intent 1.* To exempt galvanized steel pipe from the application of Sentence 2.2.6.7.(1) for certain uses, and if certain conditions are met.

**Provision: 2.2.6.7.(3)**

---

**Objective**

OH2

**Attributions**

[F46-OH2.2]

**Intent(s)**

*Intent 1.* To limit the probability that the use of inappropriate piping materials will lead to corrosion, which could lead to the failure of piping, which could lead to contamination of the water supply, which could lead to harm to persons.

*Intent 2.* To exempt, from the prohibition to use galvanized steel pipe and fittings in water distribution systems, those situations where the water is used for industrial processes and would not create a health hazard, or where the repair of an existing system with similar materials will not increase the risk.

---

## **Intent Statements: NPC 2020**

### **Provision: 2.2.6.7.(4)**

---

#### **Objective**

OH2

#### **Attributions**

[F80-OH2.1, OH2.3]

#### **Intent(s)**

*Intent 1.* To limit the probability that the performance of galvanized steel pipe and fittings will fall significantly below expectations, which could lead to the failure of such pipe or fittings, which could lead to leakage, which could lead to unsanitary conditions, which could lead to harm to persons.

---

#### **Objective**

OP5

#### **Attributions**

[F80-OP5]

#### **Intent(s)**

*Intent 1.* To limit the probability that the performance of galvanized steel pipe and fittings will fall significantly below expectations, which could lead to the failure of such pipe or fittings, which could lead to leakage, which could lead to damage to the building or facility.

### **Provision: 2.2.6.8.(1)**

---

#### **Objective**

OP5

#### **Attributions**

[F80-OP5]

#### **Intent(s)**

*Intent 1.* To limit the probability that the performance of corrugated steel pipe and couplings will fall significantly below expectations, which could lead to the failure of such pipe or couplings, which could lead to leakage, which could lead to damage to the building or facility.

### **Provision: 2.2.6.8.(2)**

---

#### **Objective**

OP5

#### **Attributions**

[F81-OP5]

#### **Intent(s)**

*Intent 1.* To limit the probability that the use of nonsealing drainage piping materials in locations where joints are required to be watertight will lead to leakage, which could lead to damage to the building or facility.

**Provision: 2.2.6.8.(3)**

---

**Objective**

OP5

**Attributions**

[F81-OP5]

**Intent(s)**

*Intent 1.* To limit the probability that an inappropriate coupling design will lead to:

- entry of roots or infiltration of surrounding material, which could lead to obstruction of flow, which could lead to storm water surcharge, or
- misalignment or separation of joints, which could lead to pipe system leakage, which could lead to soil erosion or flooding.

This is to limit the probability of water damage to the building or facility.

**Provision: 2.2.6.9.(1)**

---

**Objective**

OP5

**Attributions**

[F80-OP5]

**Intent(s)**

*Intent 1.* To limit the probability that the use of sheet metal leaders in locations where they are not visible will lead to undetected corrosion, which could lead to the failure of such leaders, which could lead to leakage, which could lead to damage to the building or facility.

**Provision: 2.2.6.10.(1)**

---

**Objective**

OH2

**Attributions**

[F80-OH2.1] Applies to *drainage systems* and *venting systems*.

[F46, F80-OH2.2] Applies to *water systems*.

**Intent(s)**

*Intent 1.* In drainage systems or venting systems, to limit the probability that the performance of stainless steel pipe will fall significantly below expectations, which could lead to the failure of such pipe, which could lead to leakage, which could lead to unsanitary conditions, which could lead to harm to persons.

*Intent 2.* In water systems, to limit the probability that the performance of stainless steel pipe will fall significantly below expectations, which could lead to the deterioration of such pipe, which could lead to the contamination of potable water, which could lead to harm to persons.

---

**Objective**

OP5

**Attributions**

[F80-OP5]

**Intent(s)**

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## **Intent Statements: NPC 2020**

*Intent 1.* To limit the probability that the performance of stainless steel pipe will fall significantly below expectations, which could lead to the failure of such pipe, which could lead to the leakage of water or sewage, which could lead to damage to the building or facility.

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### **Provision: 2.2.6.10.(2)**

#### **Objective**

OH2

#### **Attributions**

[F80-OH2.1] Applies to *drainage systems* and *venting systems*.

[F46, F80-OH2.2] Applies to *water systems*.

#### **Intent(s)**

*Intent 1.* In drainage systems or venting systems, to limit the probability that stainless steel pipe will corrode, which could lead to the failure of such pipe, which could lead to leakage, which could lead to unsanitary conditions, which could lead to harm to persons.

*Intent 2.* In water systems, to limit the probability that stainless steel pipe will corrode, which could lead to the deterioration of such pipe, which could lead to the contamination of potable water, which could lead to harm to persons

---

#### **Objective**

OP5

#### **Attributions**

[F80-OP5]

#### **Intent(s)**

*Intent 1.* To limit the probability that stainless steel pipe will corrode, which could lead to the failure of such pipe, which could lead to the leakage of water or sewage, which could lead to damage to the building or facility.

---

### **Provision: 2.2.6.11.(1)**

#### **Objective**

OH2

#### **Attributions**

[F80-OH2.1] Applies to *drainage systems* and *venting systems*.

[F46, F80-OH2.2] Applies to *water systems*.

#### **Intent(s)**

*Intent 1.* In drainage systems or venting systems, to limit the probability that the performance of stainless steel butt weld pipe fittings will fall significantly below expectations, which could lead to the failure of such pipe fittings, which could lead to leakage, which could lead to unsanitary conditions, which could lead to harm to persons.

*Intent 2.* In water systems, to limit the probability that the performance of stainless steel butt weld pipe fittings will fall significantly below expectations, which could lead to the deterioration of such pipe fittings, which could lead to the contamination of potable water, which could lead to harm to persons

---

**Objective**

OP5

**Attributions**

[F80-OP5]

**Intent(s)**

*Intent 1.* To limit the probability that the performance of stainless steel butt weld pipe fittings will fall significantly below expectations, which could lead to the failure of such pipe fittings, which could lead to the leakage of water or sewage, which could lead to damage to the building or facility.

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**Provision: 2.2.6.11.(2)**

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**Objective**

OH2

**Attributions**

[F80-OH2.1] Applies to *drainage systems* and *venting systems*.

[F46, F80-OH2.2] Applies to *water systems*.

**Intent(s)**

*Intent 1.* In drainage systems or venting systems, to limit the probability that stainless steel butt weld pipe fittings will corrode, which could lead to the failure of such pipe fittings, which could lead to leakage, which could lead to unsanitary conditions, which could lead to harm to persons.

*Intent 2.* In water systems, to limit the probability that stainless steel butt weld pipe fittings will corrode, which could lead to the deterioration of such pipe fittings, which could lead to the contamination of potable water, which could lead to harm to persons.

---

**Objective**

OP5

**Attributions**

[F80-OP5]

**Intent(s)**

*Intent 1.* To limit the probability that stainless steel butt weld pipe fittings will corrode, which could lead to the failure of such pipe fittings, which could lead to the leakage of water or sewage, which could lead to damage to the building or facility.

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**Provision: 2.2.6.12.(1)**

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**Objective**

OH2

**Attributions**

[F80-OH2.1] Applies to *drainage systems* and *venting systems*.

[F46, F80-OH2.2] Applies to *water systems*.

**Intent(s)**

*Intent 1.* In drainage systems or venting systems, to limit the probability that the performance of stainless steel pipe flanges will fall significantly below expectations, which could lead to the failure of such pipe flanges, which could lead to leakage, which could lead to unsanitary conditions, which could lead to harm to persons.

---

## **Intent Statements: NPC 2020**

*Intent 2.* In water systems, to limit the probability that the performance of stainless steel pipe flanges will fall significantly below expectations, which could lead to the deterioration of such pipe flanges, which could lead to the contamination of potable water, which could lead to harm to persons.

---

### **Objective**

OP5

### **Attributions**

[F80-OP5]

### **Intent(s)**

*Intent 1.* To limit the probability that the performance of stainless steel pipe flanges will fall significantly below expectations, which could lead to the failure of such pipe flanges, which could lead to the leakage of water or sewage, which could lead to damage to the building or facility.

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## **Provision: 2.2.6.12.(2)**

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### **Objective**

OH2

### **Attributions**

[F80-OH2.1] Applies to *drainage systems* and *venting systems*.

[F46, F80-OH2.2] Applies to *water systems*.

### **Intent(s)**

*Intent 1.* In drainage systems or venting systems, to limit the probability that stainless steel pipe flanges will corrode, which could lead to the failure of such pipe flanges, which could lead to leakage, which could lead to unsanitary conditions, which could lead to harm to persons.

*Intent 2.* In water systems, to limit the probability that stainless steel pipe flanges will corrode, which could lead to the deterioration of such pipe flanges, which could lead to the contamination of potable water, which could lead to harm to persons.

---

### **Objective**

OP5

### **Attributions**

[F80-OP5]

### **Intent(s)**

*Intent 1.* To limit the probability that stainless steel pipe flanges will corrode, which could lead to the failure of such pipe flanges, which could lead to the leakage of water or sewage, which could lead to damage to the building or facility.

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## **Provision: 2.2.6.13.(1)**

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### **Objective**

OH2

### **Attributions**

[F80-OH2.1] Applies to *drainage systems* and *venting systems*.

[F46, F80-OH2.2] Applies to *water systems*.

### **Intent(s)**

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## **Intent Statements: NPC 2020**

*Intent 1.* In drainage systems or venting systems, to limit the probability that the performance of stainless steel threaded water pipe fittings will fall significantly below expectations, which could lead to the failure of such fittings, which could lead to the leakage of water or sewage, which could lead to unsanitary conditions, which could lead to harm to persons.

*Intent 2.* In water systems, to limit the probability that the performance of stainless steel threaded water pipe fittings will fall significantly below expectations, which could lead to the deterioration of such fittings, which could lead to the contamination of potable water, which could lead to which could lead to harm to persons.

---

### **Objective**

OP5

### **Attributions**

[F20-OP5]

### **Intent(s)**

*Intent 1.* To limit the probability that the performance of stainless steel threaded water pipe fittings will fall significantly below expectations, which could lead to the failure of such fittings, which could lead to the leakage of water or sewage, which could lead to damage to the building or facility.

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## **Provision: 2.2.6.13.(2)**

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### **Objective**

OH2

### **Attributions**

[F80-OH2.1] Applies to *drainage systems* and *venting systems*.

[F46, F80-OH2.2] Applies to *water systems*.

### **Intent(s)**

*Intent 1.* In drainage systems or venting systems, to limit the probability that stainless steel threaded water pipe fittings will corrode, which could lead to the failure of such fittings, which could lead to the leakage of water or sewage, which could lead to unsanitary conditions, which could lead to harm to persons.

*Intent 2.* In water systems, to limit the probability that stainless steel threaded water pipe fittings will corrode, which could lead to the deterioration of such fittings, which could lead to the contamination of potable water, which could lead to which could lead to harm to persons.

---

### **Objective**

OP5

### **Attributions**

[F20-OP5]

### **Intent(s)**

*Intent 1.* To limit the probability that stainless steel threaded water pipe fittings will corrode, which could lead to the failure of such fittings, which could lead to the leakage of water or sewage, which could lead to damage to the building or facility.

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## **Intent Statements: NPC 2020**

### **Provision: 2.2.6.14.(1)**

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#### **Objective**

OH2

#### **Attributions**

[F46-OH2.2]

#### **Intent(s)**

*Intent 1.* In water systems, to limit the probability that the performance of stainless steel tubing will fall significantly below expectations, which could lead to the failure of such tubing, which could lead to the contamination of potable water, which could lead to harm to persons.

---

#### **Objective**

OP5

#### **Attributions**

[F80-OP5]

#### **Intent(s)**

*Intent 1.* To limit the probability that the performance of stainless steel tubing will fall significantly below expectations, which could lead to the failure of such tubing, which could lead to the leakage of water, which could lead to damage to the building or facility.

### **Provision: 2.2.6.14.(2)**

---

#### **Objective**

OH2

#### **Attributions**

[F46-OH2.2]

#### **Intent(s)**

*Intent 1.* In water systems, to limit the probability that stainless steel tubing will corrode, which could lead to the deterioration of such tubing, which could lead to the contamination of potable water, which could lead to harm to persons.

---

#### **Objective**

OP5

#### **Attributions**

[F80-OP5]

#### **Intent(s)**

*Intent 1.* To limit the probability that stainless steel tubing will corrode, which could lead to the failure of such tubing, which could lead to the leakage of water, which could lead to damage to the building or facility.

**Provision: 2.2.6.15.(1)**

---

**Objective**

OH2

**Attributions**

[F80-OH2.1, OH2.2, OH2.3]

**Intent(s)**

*Intent 1.* To limit the probability that stainless steel pipe and tubing will be installed in systems for which its properties are not suited, which could lead to the failure of such systems, which could lead to the leakage of sewage, which could lead to unsanitary conditions, which could lead to harm to persons.

*Intent 2.* To limit the probability that stainless steel pipe and tubing will be installed in systems for which its properties are not suited, which could lead to the failure of such systems, which could lead to the contamination of potable water, which could lead to harm to persons.

**Provision: 2.2.7.1.(1)**

---

**Objective**

OH2

**Attributions**

[F80-OH2.1, OH2.3] Applies to *drainage systems* and *venting systems*.

[F46-OH2.2] Applies to *water systems*.

**Intent(s)**

*Intent 1.* In drainage systems or venting systems, to limit the probability that the performance of copper pipe will fall significantly below expectations, which could lead to the failure of such pipe, which could lead to leakage, which could lead to unsanitary conditions, which could lead to harm to persons.

*Intent 2.* In water systems, to limit the probability that the performance of copper pipe will fall significantly below expectations, which could lead to the failure of such pipe, which could lead to contamination, which could lead to harm to persons.

---

**Objective**

OP5

**Attributions**

[F80-OP5]

**Intent(s)**

*Intent 1.* To limit the probability that the performance of copper pipe will fall significantly below expectations, which could lead to the failure of such pipe, which could lead to leakage of water systems, which could lead to damage to the building or facility.

**Provision: 2.2.7.1.(2)**

---

**Objective**

OH2

**Attributions**

[F80-OH2.1, OH2.3] Applies to *drainage systems* and *venting systems*.

[F46-OH2.2] Applies to *water systems*.

**Intent(s)**

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## **Intent Statements: NPC 2020**

*Intent 1.* In drainage systems or venting systems, to limit the probability that the performance of brass pipe will fall significantly below expectations, which could lead to the failure of such pipe, which could lead to leakage, which could lead to unsanitary conditions, which could lead to harm to persons.

*Intent 2.* In water systems, to limit the probability that the performance of brass pipe will fall significantly below expectations, which could lead to the failure of such pipe, which could lead to contamination, which could lead to harm to persons.

---

### **Objective**

OP5

### **Attributions**

[F80-OP5]

### **Intent(s)**

*Intent 1.* To limit the probability that the performance of brass pipe will fall significantly below expectations, which could lead to the failure of such pipe, which could lead to leakage of water systems, which could lead to damage to the building or facility.

---

## **Provision: 2.2.7.2.(1)**

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### **Objective**

OH2

### **Attributions**

[F80-OH2.1, OH2.3] Applies to *drainage systems* and *venting systems*.

[F46-OH2.2] Applies to *water systems*.

### **Intent(s)**

*Intent 1.* In drainage systems or venting systems, to limit the probability that the performance of brass or bronze pipe flanges and flanged fittings will fall significantly below expectations, which could lead to the failure of such flanges or fittings, which could lead to leakage, which could lead to unsanitary conditions, which could lead to harm to persons.

*Intent 2.* In water systems, to limit the probability that the performance of brass or bronze pipe flanges and flanged fittings will fall significantly below expectations, which could lead to the failure of such flanges or fittings, which could lead to contamination, which could lead to harm to persons.

---

### **Objective**

OP5

### **Attributions**

[F80-OP5]

### **Intent(s)**

*Intent 1.* To limit the probability that the performance of brass or bronze pipe flanges and flanged fittings will fall significantly below expectations, which could lead to the failure of such flanges or fittings, which could lead to leakage of water systems, which could lead to damage to the building or facility.

**Provision: 2.2.7.3.(1)**

---

**Objective**

OP5

**Attributions**

[F80-OP5]

**Intent(s)**

*Intent 1.* To limit the probability that the performance of brass or bronze threaded water pipe fittings will fall significantly below expectations, which could lead to the failure of such fittings, which could lead to leakage, which could lead to damage to the building or facility.

**Provision: 2.2.7.3.(2)**

---

**Objective**

OH2

**Attributions**

[F80-OH2.1, OH2.3]

**Intent(s)**

*Intent 1.* To limit the probability that fittings with rough interior surfaces will lead to blockages or rodding difficulties, which could lead to drainage system surcharges, which could lead to sewage overflowing, which could lead to harm to persons.

**Provision: 2.2.7.4.(1)**

---

**Objective**

OH2

**Attributions**

[F80-OH2.1, OH2.3] Applies to *drainage systems* and *venting systems*.

[F46-OH2.2] Applies to *water systems*.

**Intent(s)**

*Intent 1.* In drainage systems or venting systems, to limit the probability that the performance of copper tube will fall significantly below expectations, which could lead to the failure of such tube, which could lead to leakage, which could lead to unsanitary conditions, which could lead to harm to persons.

*Intent 2.* In water systems, to limit the probability that the performance of copper tube will fall significantly below expectations, which could lead to the failure of such tube, which could lead to contamination, which could lead to harm to persons.

---

**Objective**

OP5

**Attributions**

[F80-OP5]

**Intent(s)**

*Intent 1.* To limit the probability that the performance of copper tube will fall significantly below expectations, which could lead to the failure of such tube, which could lead to leakage of water systems, which could lead to damage to the building or facility.

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## **Intent Statements: NPC 2020**

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### **Provision: 2.2.7.4.(2)**

#### **Objective**

OH2

#### **Attributions**

[F80-OH2.1, OH2.2, OH2.3]

#### **Intent(s)**

*Intent 1.* To limit the probability that the installation of types of copper tube that are inappropriate to the specific requirements of the application, in regards to jointing, wall thickness and corrosion resistance, will lead to failure of the system, which could lead to leakage, which could lead to unsanitary conditions, which could lead to harm to persons.

---

### **Provision: 2.2.7.4.(3)**

#### **Objective**

OH2

#### **Attributions**

[F80-OH2.1, OH2.3, OH2.4]

#### **Intent(s)**

*Intent 1.* To limit the use of copper tube to applications and locations that are not exposed to urine. This is to limit the probability that exposure of the copper tube to urine will lead to corrosion of the tube, which could lead to its perforation, which could lead to unsanitary conditions, which could lead to harm to persons.

---

### **Provision: 2.2.7.5.(1)**

#### **Objective**

OH2

#### **Attributions**

[F80-OH2.1, OH2.4]

#### **Intent(s)**

*Intent 1.* To limit the probability that the performance of solder-joint fittings will fall significantly below expectations, which could lead to the failure of such fittings, which could lead to leakage, which could lead to unsanitary conditions, which could lead to harm to persons.

---

### **Provision: 2.2.7.5.(2)**

#### **Objective**

OP5

#### **Attributions**

[F20-OP5]

#### **Intent(s)**

*Intent 1.* To limit the probability that fittings that are incompatible with jointing methods and service conditions for pressurized water systems will lead to the failure of the water system, which could lead to leakage, which could lead to damage to the building or facility.

**Provision: 2.2.7.6.(1)**

---

**Objective**

OP5

**Attributions**

[F20-OP5]

**Intent(s)**

*Intent 1.* To limit the probability that the performance of solder-joint fittings will fall significantly below expectations, which could lead to the failure of such fittings, which could lead to leakage, which could lead to damage to the building or facility.

**Provision: 2.2.7.6.(2)**

---

**Objective**

OP5

**Attributions**

[F20-OP5]

**Intent(s)**

*Intent 1.* To limit the probability that the performance of solder-joint fittings will fall significantly below expectations, which could lead to the failure of such fittings, which could lead to leakage, which could lead to damage to the building or facility.

**Provision: 2.2.7.7.(1)**

---

**Objective**

OP5

**Attributions**

[F20-OP5]

**Intent(s)**

*Intent 1.* To limit the probability that the performance of flared-joint fittings will fall significantly below expectations, which could lead to the failure of such fittings, which could lead to leakage, which could lead to damage to the building or facility.

**Provision: 2.2.7.7.(2)**

---

**Objective**

OP5

**Attributions**

[F20-OP5]

**Intent(s)**

*Intent 1.* To limit the probability that the performance of flared-joint fittings will fall significantly below expectations, which could lead to the failure of such fittings, which could lead to leakage, which could lead to damage to the building or facility.

---

## **Intent Statements: NPC 2020**

### **Provision: 2.2.7.8.(1)**

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#### **Objective**

OH2

#### **Attributions**

[F46, F20-OH2.2, OH2.3]

#### **Intent(s)**

*Intent 1.* To limit the probability that inappropriate materials will lead to:

- dissolved lead in water systems, which could lead to contamination of potable water, or
- an inability to resist the pressure of back filling operations, which could lead to collapse of the pipe, which could lead to sewage backing up.

This is to limit the probability of unsanitary conditions, which could lead to harm to persons.

### **Provision: 2.2.7.8.(2)**

---

#### **Objective**

OH2

#### **Attributions**

[F81-OH2.1, OH2.3, OH2.4]

#### **Intent(s)**

*Intent 1.* To limit the probability that inappropriate installation will lead to waste buildup or retention of liquid in closet bends, which could lead to blockages, which could lead to sewage backing up, which could lead to unsanitary conditions, which could lead to harm to persons.

### **Provision: 2.2.8.1.(1)**

---

#### **Objective**

OH2

#### **Attributions**

[F80, F81-OH2.1]

#### **Intent(s)**

*Intent 1.* To limit the probability that the performance of pipes and fittings will fall significantly below expectations, which could lead to an inability to resist exposure to acid or corrosive waste, which could lead to the perforation of pipes and fittings, which could lead to leakage, which could lead to unsanitary conditions, which could lead to harm to persons.

---

#### **Objective**

OS3

#### **Attributions**

[F80, F81-OS3.2, OS3.4]

#### **Intent(s)**

*Intent 1.* To limit the probability that the performance of pipes and fittings will fall significantly below expectations, which could lead to corrosion, which could lead to the perforation of pipes and fittings, which could lead to leakage of acid or corrosive wastes, which could lead to harm to persons.

**Provision: 2.2.9.1.(1)**

---

**Objective**

OP5

**Attributions**

[F80-OP5]

**Intent(s)**

*Intent 1.* To limit the probability that inappropriate jointing material will lead to an inability to accommodate expected pipe movement, which could lead to crumbling of the jointing material, which could lead to leakage, which could lead to damage to the building or facility.

---

**Objective**

OH2

**Attributions**

[F80-OH2.1, OH2.3]

**Intent(s)**

*Intent 1.* To limit the probability that inappropriate jointing material will lead to an inability to accommodate expected pipe movement, which could lead to crumbling of the jointing material, which could lead to leakage, which could lead to unsanitary conditions, which could lead to harm to persons.

**Provision: 2.2.9.2.(1)**

---

**Objective**

OP5

**Attributions**

[F80-OP5]

**Intent(s)**

*Intent 1.* To limit the probability that the performance of solders for solder joint fittings will fall significantly below expectations, which could lead to the failure of such solders, which could lead to leakage, which could lead to damage to the building or facility.

---

**Objective**

OH2

**Attributions**

[F80-OH2.1, OH2.3]

**Intent(s)**

*Intent 1.* To limit the probability that the performance of solders for solder joint fittings will fall significantly below expectations, which could lead to the failure of such solders, which could lead to leakage, which could lead to unsanitary conditions, which could lead to harm to persons.

---

## **Intent Statements: NPC 2020**

### **Provision: 2.2.9.2.(2)**

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#### **Objective**

OH2

#### **Attributions**

[F46-OH2.2]

#### **Intent(s)**

*Intent 1.* To limit the probability that high lead content will lead to the transfer of excessive amounts of lead from jointing solders to potable water, which could lead to contamination of potable water, which could lead to harm to persons.

### **Provision: 2.2.9.2.(3)**

---

#### **Objective**

OH2

#### **Attributions**

[F80-OH2.1, OH2.3]

#### **Intent(s)**

*Intent 1.* To limit the probability that the performance of fluxes for soldered joints will fall significantly below expectations, which could lead to the failure of such fluxes, which could lead to leakage, which could lead to unsanitary conditions, which could lead to harm to persons.

### **Provision: 2.2.9.2.(4)**

---

#### **Objective**

OH2

#### **Attributions**

[F20, F80, F81-OH2.1, OH2.3]

#### **Intent(s)**

*Intent 1.* To limit the probability that the performance of brazing alloys will fall significantly below expectations, which could lead to the failure of such alloys, which could lead to leakage, which could lead to unsanitary conditions, which could lead to harm to persons.

### **Provision: 2.2.10.1.(1)**

---

#### **Objective**

OH2

#### **Attributions**

[F80-OH2.1]

#### **Intent(s)**

*Intent 1.* To limit the probability that the performance of brass floor flanges will fall significantly below expectations, which could lead to the failure of such flanges, which could lead to leakage, which could lead to unsanitary conditions, which could lead to harm to persons.

**Provision: 2.2.10.2.(1)**

---

**Objective**

OH2

**Attributions**

[F80-OH2.1, OH2.3]

**Intent(s)**

*Intent 1.* To limit the probability that inappropriate materials will lead to corrosion, on exposure to water, which could lead to failed or insecure connections, which could lead to leakage, which could lead to unsanitary conditions, which could lead to harm to persons.

**Provision: 2.2.10.3.(1)**

---

**Objective**

OH2

**Attributions**

[F80-OH2.1, OH2.3] Applies to *drainage systems*.

[F46-OH2.2] Applies to *water systems*.

**Intent(s)**

*Intent 1.* To limit the probability that inappropriate materials will lead to corrosion, which could lead to:

- for drainage systems, an inability to gain access for maintenance purposes, which could lead to blockage, which could lead to drainage system backup, which could lead to exposure to sewage, or
- for water systems, contamination of potable water.

This is to limit the probability of harm to persons.

**Provision: 2.2.10.3.(2)**

---

**Objective**

OH2

**Attributions**

[F80-OH2.1]

**Intent(s)**

*Intent 1.* To limit the probability that insufficiently durable cleanout fittings will lead to failure after repeated removals and reinstallations, which could lead to leakage, which could lead to unsanitary conditions, which could lead to harm to persons.

**Provision: 2.2.10.4.(1)**

---

**Objective**

OP5

**Attributions**

[F80-OP5]

**Intent(s)**

---

## **Intent Statements: NPC 2020**

*Intent 1.* To limit the probability that the performance of groove- and shoulder-type mechanical couplings will fall significantly below expectations, which could lead to the failure of such couplings, which could lead to leakage, which could lead to damage to the building or facility.

---

### **Provision: 2.2.10.4.(2)**

#### **Objective**

OH2

#### **Attributions**

[F80-OH2.1, OH2.3]

#### **Intent(s)**

*Intent 1.* To limit the probability that the performance of mechanical couplings will fall significantly below expectations, which could lead to the failure of such couplings, which could lead to leakage, which could lead to unsanitary conditions, which could lead to harm to persons.

---

### **Provision: 2.2.10.5.(1)**

#### **Objective**

OH2

#### **Attributions**

[F81-OH2.1, OH2.3]

#### **Intent(s)**

*Intent 1.* To limit the probability that the installation of fittings, which are susceptible to misalignment, will lead to system blockage, which could lead to leakage or overflow, which could lead to unsanitary conditions, which could lead to harm to persons.

---

#### **Objective**

OP5

#### **Attributions**

[F81-OP5]

#### **Intent(s)**

*Intent 1.* To limit the probability that the installation of fittings, which are susceptible to misalignment, will lead to system blockage, which could lead to leakage or overflow, which could lead to damage to the building or facility.

---

### **Provision: 2.2.10.6.(1)**

#### **Objective**

OP5

#### **Attributions**

[F80-OP5]

#### **Intent(s)**

*Intent 1.* To limit the probability that the performance of supply fittings will fall significantly below expectations, which could lead to the failure of such fittings, which could lead to leakage, which could lead to damage to the building or facility.

**Provision: 2.2.10.6.(2)**

---

**Objective**

OE1

**Attributions**

[F131-OE1.2]

**Intent(s)**

*Intent 1.* To limit the probability that water will flow from supply fittings and shower heads at a rate that exceeds the maximum permitted water flow rate, which could lead to excessive use of water, which could lead to an unacceptable effect on the environment.

*Intent 2.* To exempt lavatories in health care facilities, emergency eye washes and emergency showers, which are required to have higher flow rates to serve their intended purpose, from the application of Sentence 2.2.10.6.(2).

**Provision: 2.2.10.6.(3)**

---

**Objective**

OS3

**Attributions**

[F30-OS3.1]

**Intent(s)**

*Intent 1.* To limit the probability that the automatic compensating valve will increase water flow to a rate that exceeds that of the shower head it serves, which could lead to a sudden pressure drop in the hot or cold water delivery lines when other water-using devices are activated, which could lead to a sudden change in delivery temperature of the water, which could lead the user to abruptly move away from the shower stream, which could lead to an injury or fall, which could lead to harm to persons.

---

**Objective**

OS3

**Attributions**

[F31-OS3.2]

**Intent(s)**

*Intent 1.* To limit the probability that the automatic compensating valve will increase water flow to a rate that exceeds that of the shower head it serves, which could lead to a sudden pressure drop in the cold water delivery line when other water-using devices are activated, which could lead to a sudden increase in delivery temperature of the water, which could lead to scalding, which could lead to harm to persons.

**Provision: 2.2.10.6.(4)**

---

**Objective**

OE1

**Attributions**

[F131-OE1.2]

**Intent(s)**

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## **Intent Statements: NPC 2020**

*Intent 1.* To limit the probability that individual shower heads within a group of shower heads installed in a public showering facility will not have an integral means of stopping water flow, which could lead to the discharge of water when the shower head is not in use, which could lead to excessive use of water, which could lead to an unacceptable effect on the environment.

---

### **Provision: 2.2.10.6.(5)**

#### **Objective**

OE1

#### **Attributions**

[F131-OE1.2]

#### **Intent(s)**

*Intent 1.* To limit the probability that public lavatory supply fittings will not have an integral means of stopping water flow, which could lead to the discharge of water when the lavatory is not in use, which could lead to excessive use of water, which could lead to an unacceptable effect on the environment.

---

### **Provision: 2.2.10.6.(6)**

#### **Objective**

OH2

#### **Attributions**

[F80-OH2.1, OH2.3]

#### **Intent(s)**

*Intent 1.* To limit the probability that the performance of waste fittings will fall significantly below expectations, which could lead to the failure of such fittings, which could lead to leakage, which could lead to unsanitary conditions, which could lead to harm to persons.

---

### **Provision: 2.2.10.6.(7)**

#### **Objective**

OP5

#### **Attributions**

[F81-OP5]

#### **Intent(s)**

*Intent 1.* To limit the probability that the performance of manually operated valves of NPS 4 or less will fall significantly below expectations, which could lead to the failure of such valves, which could lead to an inability to control the water flow, which could lead to leakage, which could lead to damage to the building or facility.

---

#### **Objective**

OH2

#### **Attributions**

[F46-OH2.2]

#### **Intent(s)**

*Intent 1.* To limit the probability that manually operated valves of NPS 4 or less will be made with materials other than those listed in the standard, which could lead to an unexpected lead content in such

valves, which could lead to the contamination of potable water, which could lead to the consumption of contaminated potable water, which could lead to harm to persons.

**Provision: 2.2.10.7.(1)**

---

**Objective**

OS3

**Attributions**

[F31-OS3.2]

**Intent(s)**

*Intent 1.* To limit the probability that the temperature of the water supplied to shower heads and bathtubs will not be controllable, which could lead to:

- exposure to excessively high water temperatures, and
- unexpected variations in water temperature due to the use of other fixtures.

This is to limit the risk of scalding and thermal shock, which could lead to harm to persons.

*Intent 2.* To limit the probability that the performance of automatic compensating valves will fall significantly below expectations, which could lead to the failure of such valves, which could lead to exposure to excessively high water temperatures, which could lead to scalding and thermal shock, which could lead to harm persons.

**Provision: 2.2.10.7.(2)**

---

**Intent(s)**

*Intent 1.* To exempt the hot water supply for bathtubs from the requirement to be equipped with an automatic compensating valve complying with Sentence 2.2.10.7.(1), where such hot water supply is controlled by an alternative type of automatic compensating valve or temperature-limiting device, on the basis that these alternative valves and devices will provide an equivalent level of performance.

**Provision: 2.2.10.7.(3)**

---

**Intent(s)**

*Intent 1.* To exempt the hot water supply for shower heads and bathtubs from the requirement of Sentence 2.2.10.7.(1) where the hot water is supplied by a single tempered water line controlled by an automatic compensating valve, on the basis that this alternative solution provides an equivalent level of performance.

**Provision: 2.2.10.7.(4)**

---

**Objective**

OS3

**Attributions**

[F31-OS3.2]

**Intent(s)**

*Intent 1.* To limit the probability that persons will be exposed to excessively high water temperatures in a shower or bathtub, which could lead to harm to persons.

---

## **Intent Statements: NPC 2020**

### **Provision: 2.2.10.7.(5)**

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#### **Intent(s)**

*Intent 1.* To supersede the hot water temperature limit requirement of Sentence 2.2.10.7.(4) for health care facilities and seniors' residences and require a lower maximum hot water temperature, on the basis that persons in such facilities and residences are more likely to be more sensitive to higher water temperatures.

---

#### **Objective**

OS3

#### **Attributions**

[F31-OS3.2]

#### **Intent(s)**

*Intent 1.* To limit the probability that persons will be exposed to excessively high water temperatures in a shower or a bathtub, which could lead to harm to persons.

### **Provision: 2.2.10.8.(1)**

---

#### **Objective**

OH2

#### **Attributions**

[F81-OH2.1]

#### **Intent(s)**

*Intent 1.* To limit the probability that inappropriate design will lead to:

- inadequate flow volume, which could lead to inefficient cleansing of fixtures,
- lack of a means of adjusting flow rate to suit varying water pressures, which could lead to incomplete flushing action,
- back-siphonage, which could lead to contamination of the water supply, and
- the performance of direct flush valves falling significantly below expectations.

This is to limit the probability of failure or inadequate operation of such valves, which could lead to unsanitary conditions, which could lead to harm to persons.

---

#### **Objective**

OP5

#### **Attributions**

2.2.10.8.(1)(a), 2.2.10.8.(1)(b), 2.2.10.8.(1)(e) [F81-OP5]

#### **Intent(s)**

*Intent 1.* To limit the probability that an inappropriate design will lead to failure to shut off, which could lead to flooding, which could lead to damage to the building or facility.

**Provision: 2.2.10.9.(1)**

---

**Objective**

OH2

**Attributions**

[F40, F46-OH2.4]

**Intent(s)**

*Intent 1.* To limit the probability that an inappropriate orifice design will lead to user contact with the surface of bubblers, or deflection of the water stream to bubbler surfaces, which could lead to the consumption of contaminated water, which could lead to harm to persons.

**Provision: 2.2.10.9.(2)**

---

**Objective**

OH2

**Attributions**

[F41, F46-OH2.2]

**Intent(s)**

*Intent 1.* To limit the probability that inadequate water flow will lead to user contact with the surface of bubblers, which could lead to contamination of bubbler surfaces, which could lead to the consumption of contaminated water, which could lead to harm to persons.

**Provision: 2.2.10.9.(3)**

---

**Objective**

OH2

**Attributions**

[F41, F46-OH2.2]

**Intent(s)**

*Intent 1.* To limit the probability that the installation of bubblers on inappropriate fixtures will lead to locating bubblers where they might be subject to unsanitary conditions, which could lead to the consumption of contaminated water, which could lead to harm to persons.

**Provision: 2.2.10.10.(1)**

---

**Objective**

OH2

**Attributions**

[F46-OH2.2]

**Intent(s)**

*Intent 1.* To limit the probability that the performance of back-siphonage preventers and backflow preventers will fall significantly below expectations, which could lead to the failure or inadequate operation of such preventers, which could lead to backflow or back-siphonage of waste or sewage, which could lead to contamination of water, which could lead to harm to persons.

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## **Intent Statements: NPC 2020**

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### **Provision: 2.2.10.10.(2)**

#### **Objective**

OH2

#### **Attributions**

[F46-OH2.2]

#### **Intent(s)**

*Intent 1.* To limit the probability that the performance of back-siphonage preventers will fall significantly below expectations, which could lead to the failure or inadequate operation of such preventers, which could lead to backflow or back-siphonage of waste or sewage, which could lead to contamination of water, which could lead to harm to persons.

---

### **Provision: 2.2.10.11.(1)**

#### **Objective**

OS3

#### **Attributions**

[F31-OS3.2]

#### **Intent(s)**

*Intent 1.* To limit the probability that the performance of temperature-relief, pressure-relief, combined temperature- and pressure-relief, and vacuum-relief valves will fall significantly below expectations, which could lead to the failure or inadequate operation of such valves, which could lead to an inability to regulate the temperature or pressure of water, which could lead to:

- excessively high water temperatures, or
- excessively high water pressure.

This is to limit the probability of harm to persons.

---

#### **Objective**

OP5

#### **Attributions**

[F31-OP5]

#### **Intent(s)**

*Intent 1.* To limit the probability that the performance of temperature-relief, pressure-relief, combined temperature- and pressure-relief, and vacuum-relief valves will fall significantly below expectations, which could lead to the failure or inadequate operation of such valves, which could lead to an inability to regulate the temperature or pressure of water, which could lead to leakage, which could lead to damage to the building or facility.

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### **Provision: 2.2.10.12.(1)**

#### **Objective**

OP5

#### **Attributions**

[F81-OP5]

#### **Intent(s)**

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## **Intent Statements: NPC 2020**

*Intent 1.* To limit the probability that the performance of direct-acting valves will fall significantly below expectations, which could lead to the failure or inadequate operation of such valves, which could lead to an excessively high water pressure, which could lead to the failure of pipes or fixtures, which could lead to leakage, which could lead to damage to the building or facility.

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### **Provision: 2.2.10.13.(1)**

#### **Objective**

OS3

#### **Attributions**

[F81-OS3.2]

#### **Intent(s)**

*Intent 1.* To limit the probability that the performance of equipment for solar heating of potable water will fall significantly below expectations, which could lead to an inability to limit water temperature, which could lead to excessively high water temperatures, which could lead to harm to persons.

---

#### **Objective**

OH2

#### **Attributions**

[F46-OH2.2]

#### **Intent(s)**

*Intent 1.* To limit the probability that the performance of equipment for solar heating of potable water will fall significantly below expectations, which could lead to backflow, which could lead to contamination of potable water, which could lead to harm to persons.

---

#### **Objective**

OP5

#### **Attributions**

[F80, F81-OP5]

#### **Intent(s)**

*Intent 1.* To limit the probability that the performance of equipment for solar heating of potable water will fall significantly below expectations, which could lead to an inability to limit or accommodate water pressure, which could lead to the failure or the inadequate operation of equipment, which could lead to leakage, which could lead to damage to the building or facility.

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### **Provision: 2.2.10.14.(1)**

#### **Objective**

OP5

#### **Attributions**

[F80, F81-OP5]

#### **Intent(s)**

*Intent 1.* To limit the probability that inappropriate material or inadequate material thickness will lead to inadequate water resistance or inadequate strength, which could lead to the failure of the flashing, which could lead to roof leakage, which could lead to damage to the building or facility.

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## **Intent Statements: NPC 2020**

### **Provision: 2.2.10.14.(2)**

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#### **Objective**

OP5

#### **Attributions**

[F80, F81-OP5]

#### **Intent(s)**

*Intent 1.* To limit the probability that the performance of prefabricated flashing will fall significantly below expectations, which could lead to inadequate water resistance or inadequate strength, which could lead to the failure of such flashing, which could lead to roof leakage, which could lead to damage to the building or facility.

### **Provision: 2.2.10.15.(1)**

---

#### **Objective**

OP5

#### **Attributions**

[F20, F80-OP5]

#### **Intent(s)**

*Intent 1.* To limit the probability that the performance of water hammer arresters will fall significantly below expectations, which could lead to the failure of such arresters, which could lead to leakage, which could lead to damage to the building or facility.

### **Provision: 2.2.10.16.(1)**

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#### **Objective**

OH1

#### **Attributions**

[F81-OH1.1]

#### **Intent(s)**

*Intent 1.* To limit the probability that the performance of air admittance valves will fall significantly below expectations, which could lead to the failure of such valves, which could lead to the entry of sewer gases into occupied space, which could lead to negative effects on indoor air quality, which could lead to harm to persons.

### **Provision: 2.2.10.17.(1)**

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#### **Objective**

OH2

#### **Attributions**

[F46-OH2.2]

#### **Intent(s)**

*Intent 1.* To limit the probability that point-of-use devices, including their disposable parts, on potable water treatment systems will be made with materials other than those listed in the standard, which could lead to an unexpected lead content in such devices or parts, which could lead to the contamination of

potable water, which could lead to the consumption of contaminated potable water, which could lead to harm to persons.

---

**Objective**

OS3

**Attributions**

[F30-OS3.1]

[F46, F70-OS3.4]

**Intent(s)**

*Intent 1.* To limit the probability that the performance of point-of-use devices on potable water treatment systems, including their disposable parts, will fall significantly below expectations, which could lead to the failure of such devices or parts, which could lead to the bursting of large water treatment units, which could lead to falling system components or spillage of contents, which could lead to harm to persons.

*Intent 2.* To limit the probability that inappropriate devices or disposable parts will be installed on potable water treatment systems, which could lead to the intrusion of substances into such systems, which could lead to corrosion, which could lead to the perforation of pipes or fittings, which could lead to leakage of contaminated water, which could lead to harm to persons.

---

**Objective**

OS2

**Attributions**

[F20, F30-OS2.1]

**Intent(s)**

*Intent 1.* To limit the probability that inappropriate drinking water treatment systems will lead to an inability to resist expected gravity loads, which could lead to structural failure, which could lead to failing system and components or spillage of contents, which could lead to harm to persons.

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**Provision: 2.2.10.18.(1)**

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**Objective**

OP5

**Attributions**

[F81-OP5]

**Intent(s)**

*Intent 1.* To limit the probability that the performance of flexible water connectors will fall significantly below expectations, which could lead to the failure of such connectors, which could lead to leakage, which could lead to damage to the building or facility.

---

**Objective**

OH2

**Attributions**

[F46-OH2.2]

**Intent(s)**

*Intent 1.* To limit the probability that flexible connectors will be made with materials other than those listed in the standard, which could lead to an unexpected lead content in such connectors, which could lead

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## **Intent Statements: NPC 2020**

to the contamination of potable water, which could lead to the consumption of contaminated potable water, which could lead to harm to persons.

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### **Provision: 2.3.1.1.(1)**

#### **Intent(s)**

*Intent 1.* To state the application of Section 2.3.

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### **Provision: 2.3.2.1.(1)**

#### **Objective**

OH2

#### **Attributions**

[F80-OH2.1, OH2.3]

#### **Intent(s)**

*Intent 1.* To limit the probability that the inappropriate use of caulked lead drainage joints will lead to leakage at joints, which could lead to unsanitary conditions, which could lead to harm to persons.

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### **Provision: 2.3.2.1.(2)**

#### **Objective**

OH2

#### **Attributions**

[F80-OH2.1]

#### **Intent(s)**

*Intent 1.* To limit the probability that inadequate packing or inadequate caulking will lead to leakage at joints, which could lead to unsanitary conditions, which could lead to harm to persons.

---

### **Provision: 2.3.2.1.(3)**

#### **Objective**

OH2

#### **Attributions**

[F81-OH2.1]

#### **Intent(s)**

*Intent 1.* To limit the probability that leakage at joints will not be detected, which could lead to entry of waterborne pollutants into buildings, which could lead to unsanitary conditions, which could lead to harm to persons.

---

### **Provision: 2.3.2.1.(4)**

#### **Objective**

OH2

#### **Attributions**

[F81-OH2.1]

**Intent(s)**

*Intent 1.* To limit the probability that excessive flow pressure on caulked joints will lead to leakage, which could lead to unsanitary conditions, which could lead to harm to persons.

**Provision: 2.3.2.2.(1)**

---

**Objective**

OH2

**Attributions**

[F80, F81-OH2.1]

**Intent(s)**

*Intent 1.* To limit the probability that an inappropriate use of wiped joints will lead to joint failure, which could lead to leakage, which could lead to unsanitary conditions, which could lead to harm to persons.

**Objective**

OP5

**Attributions**

[F80, F81-OP5]

**Intent(s)**

*Intent 1.* To limit the probability that an inappropriate use of wiped joints will lead to joint failure, which could lead to leakage, which could lead to damage to the building or facility.

**Provision: 2.3.2.2.(2)**

---

**Objective**

OH2

**Attributions**

[F80, F81-OH2.1, OH2.2, OH2.3]

**Intent(s)**

*Intent 1.* To limit the probability of:

- an inappropriate bonding material,
- inadequate width of bonding surface, or
- inadequate joint thickness.

This is to limit the probability of joint failure, which could lead to leakage, which could lead to unsanitary conditions, which could lead to harm to persons.

**Provision: 2.3.2.2.(3)**

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**Objective**

OH2

**Attributions**

[F80, F81-OH2.1, OH2.2, OH2.3]

**Intent(s)**

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## **Intent Statements: NPC 2020**

*Intent 1.* To limit the probability that an inadequate contact area between flange surfaces will lead to joint failure, which could lead to leakage, which could lead to unsanitary conditions, which could lead to harm to persons.

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### **Provision: 2.3.2.3.(1)**

#### **Objective**

OH2

#### **Attributions**

[F80, F81-OH2.1, OH2.2, OH2.3]

#### **Intent(s)**

*Intent 1.* To limit the probability that an obstruction or deposit of debris in water supply pipes will lead to inadequate water flow, which could lead to negative effects on the operation of fixtures, which could lead to unsanitary conditions, which could lead to harm to persons.

*Intent 2.* To limit the probability that obstruction or deposit of debris in drainage pipes will lead to obstruction of flow, which could lead to blockage, which could lead to unsanitary conditions, which could lead to harm to persons.

---

### **Provision: 2.3.2.3.(2)**

#### **Objective**

OH2

#### **Attributions**

[F70-OH2.2]

#### **Intent(s)**

*Intent 1.* To limit the probability that the application of compounds to the interior of piping systems will lead to contamination of potable water, which could lead to harm to persons.

---

### **Provision: 2.3.2.4.(1)**

#### **Objective**

OH2

#### **Attributions**

[F20, F81-OH2.1, OH2.2, OH2.3]

#### **Intent(s)**

*Intent 1.* To limit the probability that the performance of soldered joints will fall significantly below expectations, which could lead to the failure of such joints, which could lead to leakage, which could lead to unsanitary conditions, which could lead to harm to persons.

---

### **Provision: 2.3.2.5.(1)**

#### **Objective**

OH2

#### **Attributions**

[F20, F81-OH2.1, OH2.2, OH2.3]

#### **Intent(s)**

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## **Intent Statements: NPC 2020**

*Intent 1.* To limit the probability that improperly formed flared joints will lead to an inadequate seal, which could lead to joint failure, which could lead to leakage, which could lead to unsanitary conditions, which could lead to harm to persons.

---

### **Objective**

OP5

### **Attributions**

[F20, F81-OP5]

### **Intent(s)**

*Intent 1.* To limit the probability that improperly formed flared joints will lead to an inadequate seal, which could lead to joint failure, which could lead to leakage, which could lead to damage to the building or facility.

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### **Provision: 2.3.2.5.(2)**

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### **Objective**

OH2

### **Attributions**

[F20, F81-OH2.1, OH2.2, OH2.3]

### **Intent(s)**

*Intent 1.* To limit the probability that the use of inappropriate materials will lead to cracking of pipes, which could lead to joint failure, which could lead to leakage, which could lead to unsanitary conditions, which could lead to harm to persons.

---

### **Objective**

OP5

### **Attributions**

[F20, F81-OP5]

### **Intent(s)**

*Intent 1.* To limit the probability that the use of inappropriate materials will lead to cracking of pipes, which could lead to joint failure, which could lead to leakage, which could lead to damage to the building or facility.

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### **Provision: 2.3.2.6.(1)**

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### **Objective**

OH2

### **Attributions**

[F20-OH2.1, OH2.2, OH2.3]

### **Intent(s)**

*Intent 1.* To limit the probability that an inappropriate joint design will lead to joint failure, which could lead to leakage, which could lead to unsanitary conditions, which could lead to harm to persons.

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## **Intent Statements: NPC 2020**

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### **Objective**

OP5

### **Attributions**

[F20-OP5]

### **Intent(s)**

*Intent 1.* To limit the probability that an inappropriate joint design will lead to joint failure, which could lead to leakage, which could lead to damage to the building or facility.

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### **Provision: 2.3.2.7.(1)**

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### **Objective**

OH1

### **Attributions**

[F20, F81-OH1.1] Applies to bell and spigot joints in *venting systems*.

### **Intent(s)**

*Intent 1.* To limit the probability that the inappropriate use of cold-caulked joints will lead to joint failure, which could lead to leakage, which could lead to entry of sewer gases into occupied space, which could lead to negative effects on indoor air quality, which could lead to harm to persons.

---

### **Objective**

OH2

### **Attributions**

[F20, F81-OH2.1, OH2.3] Applies to bell and spigot joints in *drainage systems* or *venting systems*.

### **Intent(s)**

*Intent 1.* To limit the probability that the inappropriate use of cold-caulked joints will lead to joint failure, which could lead to leakage, which could lead to unsanitary conditions, which could lead to harm to persons.

---

### **Objective**

OP5

### **Attributions**

[F20, F81-OP5]

### **Intent(s)**

*Intent 1.* To limit the probability that the inappropriate use of cold-caulked joints will lead to joint failure, which could lead to leakage, which could lead to damage to the building or facility.

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### **Provision: 2.3.2.7.(2)**

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### **Objective**

OH1

### **Attributions**

[F20, F81-OH1.1]

### **Intent(s)**

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## **Intent Statements: NPC 2020**

*Intent 1.* To limit the probability that an inappropriate practice will lead to joint failure, which could lead to leakage, which could lead to the entry of sewer gases into occupied space, which could lead to negative effects on indoor air quality, which could lead to harm to persons.

---

### **Objective**

OP5

### **Attributions**

[F20, F81-OP5]

### **Intent(s)**

*Intent 1.* To limit the probability that an inappropriate practice will lead to joint failure, which could lead to leakage, which could lead to damage to the building or facility.

---

### **Objective**

OH2

### **Attributions**

[F20, F81-OH2.1, OH2.2, OH2.3]

### **Intent(s)**

*Intent 1.* To limit the probability that an inappropriate practice will lead to joint failure, which could lead to leakage, which could lead to unsanitary conditions, which could lead to harm to persons.

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## **Provision: 2.3.2.7.(3)**

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### **Objective**

OH2

### **Attributions**

[F20-OH2.1, OH2.3]

### **Intent(s)**

*Intent 1.* To limit the probability that an inadequate depth or inappropriate installation procedures will lead to joint failure, which could lead to leakage, which could lead to unsanitary conditions, which could lead to harm to persons.

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## **Provision: 2.3.2.8.(1)**

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### **Objective**

OH2

### **Attributions**

[F20, F81-OH2.1, OH2.2, OH2.3]

### **Intent(s)**

*Intent 1.* To limit the probability that the performance of stainless steel welded joints will fall significantly below expectations, which could lead to the failure of such joints, which could lead to leakage, which could lead to unsanitary conditions, which could lead to harm to persons.

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## **Intent Statements: NPC 2020**

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### **Provision: 2.3.2.8.(2)**

#### **Objective**

OH2

#### **Attributions**

[F20, F81-OH2.1, OH2.2, OH2.3]

#### **Intent(s)**

*Intent 1.* To limit the probability that inadequate material thickness will lead to the failure of butt weld pipe fittings, which could lead to leakage, which could lead to unsanitary conditions, which could lead to harm to persons.

---

### **Provision: 2.3.3.1.(1)**

#### **Objective**

OH1

#### **Attributions**

[F81-OH1.1]

#### **Intent(s)**

*Intent 1.* To limit the probability that inadequate provision, such as material thickness or reinforcement, for drilling and tapping, will lead to joint failure, which could lead to leakage, which could lead to the entry of sewer gases into occupied space, which could lead to negative effects on indoor air quality, which could lead to harm to persons.

---

#### **Objective**

OH2

#### **Attributions**

[F20, F81-OH2.2, OH2.3]

#### **Intent(s)**

*Intent 1.* To limit the probability that inadequate provision, such as material thickness or reinforcement, for drilling and tapping, will lead to joint failure, which could lead to leakage, which could lead to unsanitary conditions, which could lead to harm to persons.

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### **Provision: 2.3.3.2.(1)**

#### **Objective**

OH2

#### **Attributions**

[F81-OH2.1, OH2.3]

#### **Intent(s)**

*Intent 1.* To limit the probability that branch tubes will protrude excessively into run tubes, which could lead to flow obstruction, which could lead to the inadequate operation of fixtures, which could lead to unsanitary conditions, which could lead to harm to persons.

---

**Objective**

OP5

**Attributions**

[F20-OP5]

**Intent(s)**

*Intent 1.* To limit the probability that:

- inappropriate tools will be used, which could lead to inadequate joint strength,
- excessively large branch sizes will be used, which could lead to excessive weakening of run tubes, or
- the strength of brazing material will be inadequate, which could lead to inadequate joint strength.

This is to limit the probability of joint failure, which could lead to leakage, which could lead to damage to the building or facility.

**Provision: 2.3.3.3.(1)**

---

**Objective**

OH1

**Attributions**

[F20-OH1.1]

**Intent(s)**

*Intent 1.* To limit the probability of embrittlement of material or stress concentration points, which could lead to joint failure, which could lead to leakage, which could lead to the entry of sewer gases into occupied space, which could lead to negative effects on indoor air quality, which could lead to harm to persons.

---

**Objective**

OH2

**Attributions**

[F20-OH2.1, OH2.2, OH2.3]

**Intent(s)**

*Intent 1.* To limit the probability of embrittlement of material or stress concentration points, which could lead to joint failure, which could lead to leakage, which could lead to unsanitary conditions, which could lead to harm to persons.

**Provision: 2.3.3.3.(2)**

---

**Objective**

OH2

**Attributions**

[F80-OH2.2]

**Intent(s)**

*Intent 1.* To limit the probability that the application of heat will lead to damage to zinc coatings, which could lead to inadequate corrosion resistance, which could lead to corrosion, which could lead to contamination of potable water, which could lead to harm to persons.

---

## **Intent Statements: NPC 2020**

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### **Objective**

OP5

### **Attributions**

[F80-OP5]

### **Intent(s)**

*Intent 1.* To limit the probability that the application of heat will lead to damage to zinc coatings, which could lead to inadequate corrosion resistance, which could lead to the failure of pipes or fittings, which could lead to leakage, which could lead to damage to the building or facility.

---

## **Provision: 2.3.3.4.(1)**

---

### **Objective**

OH1

### **Attributions**

[F81-OH1.1]

### **Intent(s)**

*Intent 1.* To limit the probability that an inappropriate joint design installed downstream of a trap weir will lead to the failure of the gasket seal, which could lead to leakage, which could lead to the entry of sewer gases into occupied space, which could lead to negative effects on indoor air quality, which could lead to harm to persons.

---

### **Objective**

OH2

### **Attributions**

[F81-OH2.1, OH2.3]

### **Intent(s)**

*Intent 1.* To limit the probability that an inappropriate joint design installed downstream of a trap weir will lead to the failure of the gasket seal, which could lead to leakage, which could lead to unsanitary conditions, which could lead to harm to persons.

---

## **Provision: 2.3.3.4.(2)**

---

### **Objective**

OH1

### **Attributions**

[F81-OH1.1]

### **Intent(s)**

*Intent 1.* To limit the probability that installation in inaccessible areas, of joints that are subject to loosening, will lead to undetected leakage, which could lead to the entry of sewer gases into occupied space, which could lead to negative effects on indoor air quality, which could lead to harm to persons.

---

**Objective**

OH2

**Attributions**

[F81-OH2.1, OH2.3]

**Intent(s)**

*Intent 1.* To limit the probability that installation in inaccessible areas, of joints that are subject to loosening, will lead to undetected leakage, which could lead to unsanitary conditions, which could lead to harm to persons.

---

**Provision: 2.3.3.5.(1)**

---

**Objective**

OH1

**Attributions**

[F81-OH1.1]

**Intent(s)**

*Intent 1.* To limit the probability that connections will be made in a manner that compromises the ability to drain plumbing systems, which could lead to standing water or sewage in pipes, which could lead to the entry of sewer gases into occupied space, which could lead to negative effects on indoor air quality, which could lead to harm to persons.

---

**Objective**

OH2

**Attributions**

[F70, F80-OH2.2]

**Intent(s)**

*Intent 1.* To limit the probability that increaser or reducer fittings will be installed in a manner that compromises the ability to drain plumbing systems, which could lead to standing water in pipes, which could lead to corrosion, which could lead to contamination of potable water, which could lead to harm to persons.

---

**Provision: 2.3.3.6.(1)**

---

**Objective**

OH1

**Attributions**

[F80-OH1.1]

**Intent(s)**

*Intent 1.* To limit the probability that the use of inappropriate adaptors, connectors or mechanical joints will lead to electrolytic corrosion, which could lead to joint failure, which could lead to leakage, which could lead to the entry of sewer gases into occupied space, which could lead to negative effects on indoor air quality, which could lead to harm to persons.

---

## **Intent Statements: NPC 2020**

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### **Objective**

OP5

### **Attributions**

[F80-OP5]

### **Intent(s)**

*Intent 1.* To limit the probability that the use of inappropriate adaptors, connectors or mechanical joints will lead to electrolytic corrosion, which could lead to joint failure, which could lead to leakage, which could lead to damage to the building or facility.

---

### **Objective**

OH2

### **Attributions**

[F80-OH2.1]

### **Intent(s)**

*Intent 1.* To limit the probability that the use of inappropriate adaptors, connectors or mechanical joints will lead to electrolytic corrosion, which could lead to joint failure, which could lead to leakage, which could lead to unsanitary conditions, which could lead to harm to persons.

---

## **Provision: 2.3.3.7.(1)**

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### **Objective**

OP5

### **Attributions**

[F21, F81-OP5]

### **Intent(s)**

*Intent 1.* To limit the probability that the inadequate design or installation of leaders will lead to an inability to lead rainwater to the ground without contact with the building, which could lead to damage to the building or facility.

---

## **Provision: 2.3.3.8.(1)**

---

### **Objective**

OH2

### **Attributions**

[F80-OH2.1, OH2.3]

### **Intent(s)**

*Intent 1.* To limit the probability that inappropriate connections to fixture drains will lead to leakage, which could lead to unsanitary conditions, which could lead to harm to persons.

**Provision: 2.3.3.8.(2)**

---

**Objective**

OH2

**Attributions**

[F80-OH2.1]

**Intent(s)**

*Intent 1.* To limit the probability that joining inappropriate materials will lead to excessive corrosion of flanges, which could lead to leakage, which could lead to unsanitary conditions, which could lead to harm to persons.

**Provision: 2.3.3.8.(3)**

---

**Intent(s)**

*Intent 1.* To modify the application of Sentence 2.3.3.8.(2) where corrosion is not likely.

**Provision: 2.3.3.8.(4)**

---

**Objective**

OH2

**Attributions**

[F20-OH2.1]

**Intent(s)**

*Intent 1.* To limit the probability that inadequate fastening will lead to joint leakage, which could lead to unsanitary conditions, which could lead to harm to persons.

**Objective**

OS3

**Attributions**

[F20-OS3.1]

**Intent(s)**

*Intent 1.* To limit the probability that inadequate mounting will lead to the damage or collapse of fixtures, which could lead to harm to persons.

**Provision: 2.3.3.8.(5)**

---

**Objective**

OH2

**Attributions**

[F20, F43-OH2.1]

**Intent(s)**

*Intent 1.* To limit the probability that inadequate attachment or instability of the water-closet bowl will lead to joint leakage, which could lead to unsanitary conditions, which could lead to harm to persons.

---

## **Intent Statements: NPC 2020**

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### **Objective**

OS3

### **Attributions**

[F20, F30-OS3.1]

### **Intent(s)**

*Intent 1.* To limit the probability that inadequate attachment or instability of the water-closet bowl will lead to an inability to support the person using it, which could lead to falling, which could lead to harm to persons.

---

### **Provision: 2.3.3.8.(6)**

---

### **Objective**

OH2

### **Attributions**

[F81-OH2.1]

### **Intent(s)**

*Intent 1.* To limit the probability that an inappropriate sealant will lead to joint leakage, which could lead to unsanitary conditions, which could lead to harm to persons.

---

### **Provision: 2.3.3.8.(7)**

---

### **Objective**

OH2

### **Attributions**

[F21-OH2.1]

### **Intent(s)**

*Intent 1.* To limit the probability that an inadequate extension will lead to joint failure from contraction, expansion and/or building shrinkage, which could lead to leakage, which could lead to unsanitary conditions, which could lead to harm to persons.

---

### **Provision: 2.3.3.9.(1)**

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### **Objective**

OH1

### **Attributions**

[F21-OH1.1]

### **Intent(s)**

*Intent 1.* To limit the probability that an inappropriate design will lead to an inability to accommodate movement due to shrinkage, settlement, or temperature- or soil-related expansion and contraction of vent pipes in DWV systems, which could lead to the failure of pipes, joints or fixtures, which could lead to leakage, which could lead to the entry of sewer gases into occupied space, which could lead to negative effects on indoor air quality, which could lead to harm to persons.

---

**Objective**

OH2

**Attributions**

[F21-OH2.1]

**Intent(s)**

*Intent 1.* To limit the probability that an inappropriate design will lead to an inability to accommodate shrinkage, settlement, or temperature- or soil-related expansion and contraction of drain and waste pipes in DWV piping systems, which could lead to the failure of pipes, joints or fixtures, which could lead to leakage, which could lead to unsanitary conditions, which could lead to harm to persons.

---

**Objective**

OP5

**Attributions**

[F21-OP5]

**Intent(s)**

*Intent 1.* To limit the probability that an inappropriate design will lead to an inability to accommodate shrinkage, settlement, or temperature- or soil-related expansion and contraction of piping systems, which could lead to the failure of pipes, joints or fixtures, which could lead to leakage, which could lead to damage to the building or facility.

---

**Provision: 2.3.3.10.(1)**

---

**Objective**

OH1

**Attributions**

[F20-OH1.1]

**Intent(s)**

*Intent 1.* To limit the probability that bending hard temper copper tubing will lead to cracking, which could lead to leakage, which could lead to the entry of sewer gases into occupied space, which could lead to negative effects on indoor air quality, which could lead to harm to persons.

---

**Objective**

OP5

**Attributions**

[F20-OP5]

**Intent(s)**

*Intent 1.* To limit the probability that bending hard temper copper tubing will lead to cracking, which could lead to leakage, which could lead to damage to the building or facility.

---

## **Intent Statements: NPC 2020**

### **Provision: 2.3.3.11.(1)**

---

#### **Objective**

OH2

#### **Attributions**

[F81-OH2.2, OH2.4]

#### **Intent(s)**

*Intent 1.* To limit the probability that an inappropriate drain termination of indirectly connected fixtures or devices will lead to contact with sewage or waste water that may back up in systems, which could lead to unsanitary conditions, which could lead to harm to persons.

### **Provision: 2.3.3.11.(2)**

---

#### **Objective**

OH2

#### **Attributions**

[F81-OH2.2, OH2.4]

#### **Intent(s)**

*Intent 1.* To limit the probability that an inadequately sized air break will lead to backflow into locations intended to be sanitary, which could lead to unsanitary conditions, which could lead to harm to persons.

### **Provision: 2.3.3.12.(1)**

---

#### **Objective**

OP5

#### **Attributions**

[F20, F80-OP5]

#### **Intent(s)**

*Intent 1.* To limit the probability that inappropriate jointing methods will lead to an inability to accommodate expected pipe movement, which could lead to joint failure, which could lead to leakage, which could lead to damage to the building or facility.

### **Provision: 2.3.3.12.(2)**

---

#### **Objective**

OP5

#### **Attributions**

[F20, F80-OP5]

#### **Intent(s)**

*Intent 1.* To limit the probability that the inability to easily access a joint and repair it will lead to joint failure, which could lead to leakage, which could lead to damage to the building or facility.

**Provision: 2.3.4.1.(1)**

---

**Objective**

OH2

**Attributions**

[F20-OH2.1, OH2.4]

**Intent(s)**

*Intent 1.* To limit the probability that inadequate support will lead to an inability to resist expected gravity loads, which could lead to the failure of drainage system piping, which could lead to leakage, which could lead to unsanitary conditions, which could lead to harm to persons.

---

**Objective**

OS3

**Attributions**

[F20-OS3.1]

**Intent(s)**

*Intent 1.* To limit the probability that inadequate support will lead to an inability to resist expected gravity loads, which could lead to the failure of the piping system, which could lead to falling system components or spillage of contents, which could lead to harm to persons.

---

**Objective**

OP5

**Attributions**

[F20-OP5]

**Intent(s)**

*Intent 1.* To limit the probability that inadequate support will lead to an inability to resist expected gravity loads, which could lead to the failure of the piping system, which could lead to leakage, which could lead to damage to the building or facility.

**Provision: 2.3.4.1.(2)**

---

**Objective**

OS3

**Attributions**

[F20-OS3.1]

**Intent(s)**

*Intent 1.* To limit the probability that inadequate support will lead to the transfer of the load to piping, which could lead to the failure of such piping, which could lead to falling system components or spillage of contents, which could lead to harm to persons.

---

**Objective**

OH2

**Attributions**

[F20-OH2.1, OH2.3]

**Intent(s)**

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## **Intent Statements: NPC 2020**

*Intent 1.* To limit the probability that inadequate support will lead to the transfer of the load to piping, which could lead to the failure of such piping, which could lead to leakage, which could lead to unsanitary conditions, which could lead to harm to persons.

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### **Provision: 2.3.4.2.(1)**

#### **Objective**

OS3

#### **Attributions**

[F20-OS3.1]

#### **Intent(s)**

*Intent 1.* To limit the probability that shared support will lead to an inability to resist expected gravity loads, which could lead to falling system components or spillage of contents, which could lead to harm to persons.

---

#### **Objective**

OH2

#### **Attributions**

[F20-OH2.1, OH2.3]

#### **Intent(s)**

*Intent 1.* To limit the probability that shared support will lead to an inability to resist expected gravity loads, which could lead to the failure of piping, fixtures, tanks or devices, which could lead to leakage, which could lead to unsanitary conditions, which could lead to harm to persons.

---

#### **Objective**

OP5

#### **Attributions**

[F20-OP5]

#### **Intent(s)**

*Intent 1.* To limit the probability that shared support will lead to an inability to resist expected gravity loads, which could lead to the failure of piping, fixtures, tanks or devices, which could lead to leakage, which could lead to damage to the building or facility.

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### **Provision: 2.3.4.3.(1)**

#### **Objective**

OH2

#### **Attributions**

[F80-OH2.1, OH2.3]

#### **Intent(s)**

*Intent 1.* To limit the probability that electrically incompatible materials will lead to galvanic or electrolytic corrosion, which could lead to the failure of hangers, supports, tubing or pipes, which could lead to leakage, which could lead to unsanitary conditions, which could lead to harm to persons.

---

**Objective**

OS3

**Attributions**

[F80-OS3.1]

**Intent(s)**

*Intent 1.* To limit the probability that electrically incompatible materials will lead to galvanic or electrolytic corrosion, which could lead to the failure of hangers, supports, tubing or pipes, which could lead to falling system components or spillage of contents, which could lead to harm to persons.

---

**Objective**

OP5

**Attributions**

[F80-OP5]

**Intent(s)**

*Intent 1.* To limit the probability that electrically incompatible materials will lead to galvanic or electrolytic corrosion, which could lead to the failure of hangers, supports, tubing or pipes, which could lead to leakage, which could lead to damage to the building or facility.

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**Provision: 2.3.4.3.(2)**

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**Objective**

OH2

**Attributions**

[F80-OH2.1, OH2.3]

**Intent(s)**

*Intent 1.* To limit the probability that contact between electrically incompatible materials will lead to galvanic or electrolytic corrosion, which could lead to the failure of hangers, supports, tubing or pipes, which could lead to leakage, which could lead to unsanitary conditions, which could lead to harm to persons.

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**Objective**

OS3

**Attributions**

[F80-OS3.1]

**Intent(s)**

*Intent 1.* To limit the probability that contact between electrically incompatible materials will lead to galvanic or electrolytic corrosion, which could lead to the failure of hangers, supports, tubing or pipes, which could lead to falling system components or spillage of contents, which could lead to harm to persons.

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**Objective**

OP5

**Attributions**

[F80-OP5]

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## **Intent Statements: NPC 2020**

### **Intent(s)**

*Intent 1.* To limit the probability that contact between electrically incompatible materials will lead to galvanic or electrolytic corrosion, which could lead to the failure of hangers, supports, tubing or pipes, which could lead to leakage, which could lead to damage to the building or facility.

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### **Provision: 2.3.4.4.(1)**

#### **Objective**

OH2

#### **Attributions**

[F20-OH2.1]

### **Intent(s)**

*Intent 1.* To limit the probability that inadequate support will lead to an inability of pipes, fittings and joints to resist expected compressive and tensile stresses due to self-weight, which could lead to the failure of pipes, fittings or joints, which could lead to leakage, which could lead to unsanitary conditions, which could lead to harm to persons.

---

#### **Objective**

OS3

#### **Attributions**

[F20-OS3.1]

### **Intent(s)**

*Intent 1.* To limit the probability that inadequate support will lead to an inability of pipes, fittings and joints to resist expected compressive and tensile stresses due to self-weight, which could lead to the failure of pipes, fittings or joints, which could lead to falling system components or spillage of contents, which could lead to harm to persons.

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### **Provision: 2.3.4.4.(2)**

#### **Objective**

OH2

#### **Attributions**

[F20-OH2.1]

### **Intent(s)**

*Intent 1.* To limit the probability that excessive support spacing will lead to an inability of pipes, fittings and joints to resist expected compressive and tensile stresses due to self-weight, which could lead to the failure of pipes, fittings or joints, which could lead to leakage, which could lead to unsanitary conditions, which could lead to harm to persons.

---

#### **Objective**

OS3

#### **Attributions**

[F20-OS3.1]

### **Intent(s)**

*Intent 1.* To limit the probability that excessive support spacing will lead to an inability of pipes, fittings and joints to resist expected compressive and tensile stresses due to self-weight, which could lead to

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## **Intent Statements: NPC 2020**

the failure of pipes, fittings or joints, which could lead to falling system components or spillage of contents, which could lead to harm to persons.

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### **Objective**

OP5

### **Attributions**

[F20-OP5]

### **Intent(s)**

*Intent 1.* To limit the probability that excessive support spacing will lead to an inability of pipes, fittings and joints to resist expected compressive and tensile stresses due to self-weight, which could lead to the failure of pipes, fittings or joints, which could lead to leakage, which could lead to damage to the building or facility.

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### **Provision: 2.3.4.5.(1)**

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### **Objective**

OS3

### **Attributions**

[F20-OS3.1]

### **Intent(s)**

*Intent 1.* To limit the probability that inadequate bracing will lead to excessive swaying or buckling of nominally horizontal piping, which could lead to the failure of the piping system, which could lead to falling system components or spillage of contents, which could lead to harm to persons.

---

### **Objective**

OH2

### **Attributions**

[F20-OH2.1, OH2.3]

### **Intent(s)**

*Intent 1.* To limit the probability that inadequate bracing will lead to excessive swaying or buckling of nominally horizontal piping, which could lead to the failure of the piping system, which could lead to leakage, which could lead to unsanitary conditions, which could lead to harm to persons.

---

### **Objective**

OP5

### **Attributions**

[F20-OP5]

### **Intent(s)**

*Intent 1.* To limit the probability that inadequate bracing will lead to excessive swaying or buckling of nominally horizontal piping, which could lead to the failure of the piping system, which could lead to leakage, which could lead to damage to the building or facility.

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## **Intent Statements: NPC 2020**

### **Provision: 2.3.4.5.(2)**

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#### **Objective**

OS3

#### **Attributions**

[F20-OS3.1]

#### **Intent(s)**

*Intent 1.* To limit the probability that excessive support spacing will lead to an inability of pipes, fittings and joints to resist expected bending stresses due to self-weight and the weight of contents, which could lead to the failure of pipes, fittings or joints, which could lead to falling system components or spillage of contents, which could lead to harm to persons.

---

#### **Objective**

OH2

#### **Attributions**

[F20-OH2.1]

#### **Intent(s)**

*Intent 1.* To limit the probability that excessive support spacing will lead to an inability of pipes, fittings and joints to resist expected bending stresses due to self-weight and the weight of contents, which could lead to the failure of pipes, fittings or joints, which could lead to leakage, which could lead to unsanitary conditions, which could lead to harm to persons.

---

#### **Objective**

OP5

#### **Attributions**

[F20-OP5]

#### **Intent(s)**

*Intent 1.* To limit the probability that excessive support spacing will lead to an inability of pipes, fittings and joints to resist expected bending stresses due to self-weight and the weight of contents, which could lead to the failure of pipes, fittings or joints, which could lead to leakage, which could lead to damage to the building or facility.

### **Provision: 2.3.4.5.(3)**

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#### **Objective**

OP5

#### **Attributions**

[F20-OP5]

#### **Intent(s)**

*Intent 1.* To limit the probability that inappropriate installation practices will lead to undue strain on pipes, fittings and joints, which could lead to the failure of pipes, fittings or joints, which could lead to leakage, which could lead to damage to the building or facility.

---

**Objective**

OS3

**Attributions**

[F20, F81-OS3.1]

**Intent(s)**

*Intent 1.* To limit the probability that inappropriate installation practices will lead to undue strain on pipes, fittings and joints, which could lead to the failure of pipes, fittings or joints, which could lead to falling system components or spillage of contents, which could lead to harm to persons.

---

**Objective**

OH2

**Attributions**

[F20-OH2.1]

**Intent(s)**

*Intent 1.* To limit the probability that inappropriate installation practices will lead to undue strain on pipes, fittings and joints, which could lead to the failure of pipes, fittings or joints, which could lead to leakage, which could lead to unsanitary conditions, which could lead to harm to persons.

---

**Provision: 2.3.4.5.(4)**

---

**Objective**

OP5

**Attributions**

[F81-OP5]

**Intent(s)**

*Intent 1.* To limit the probability that inappropriate hangers or hanger installation will lead to damage to soft pipe materials by abrasion, which could lead to leakage, which could lead to damage to the building or facility.

---

**Objective**

OS3

**Attributions**

[F81-OS3.1]

**Intent(s)**

*Intent 1.* To limit the probability that inappropriate hangers or hanger installation will lead to damage to soft pipe materials by abrasion, which could lead to the failure of pipes or fittings, which could lead to falling system components or spillage of contents, which could lead to harm to persons.

---

**Provision: 2.3.4.5.(5)**

---

**Objective**

OP5

**Attributions**

[F20, F21-OP5]

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## **Intent Statements: NPC 2020**

### **Intent(s)**

*Intent 1.* To limit the probability that inadequate hanger strength will lead to an inability of pipes, fittings and joints to resist expected bending stresses due to self-weight and the weight of contents, which could lead to the failure of pipes, fittings or joints, which could lead to leakage, which could lead to damage to the building or facility.

---

### **Objective**

OS3

### **Attributions**

[F20-OS3.1]

### **Intent(s)**

*Intent 1.* To limit the probability that inadequate hanger strength will lead to an inability of pipes, fittings and joints to resist expected bending stresses due to self-weight and the weight of contents, which could lead to the failure of pipes, fittings or joints, which could lead to falling system components or spillage of contents, which could lead to harm to persons.

---

### **Objective**

OH2

### **Attributions**

[F20-OH2.1]

### **Intent(s)**

*Intent 1.* To limit the probability that inadequate hanger strength will lead to an inability of pipes, fittings and joints to resist expected bending stresses due to self-weight and the weight of contents, which could lead to the failure of pipes, fittings or joints, which could lead to leakage, which could lead to unsanitary conditions, which could lead to harm to persons.

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## **Provision: 2.3.4.5.(6)**

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### **Objective**

OP5

### **Attributions**

[F20-OP5]

### **Intent(s)**

*Intent 1.* To limit the probability that inadequate anchorage of hangers will lead to an inability to support the weight of pipes, fittings and joints, and their contents, which could lead to the failure of pipes, fittings or joints, which could lead to leakage, which could lead to damage to the building or facility.

---

### **Objective**

OS3

### **Attributions**

[F20-OS3.1]

### **Intent(s)**

*Intent 1.* To limit the probability that inadequate anchorage of hangers will lead to an inability to support the weight of pipes, fittings and joints, and their contents, which could lead to the failure of pipes, fittings or joints, which could lead to falling system components or spillage of contents, which could lead to harm to persons.

---

**Objective**

OH2

**Attributions**

[F20-OH2.1]

**Intent(s)**

*Intent 1.* To limit the probability that inadequate anchorage of hangers will lead to an inability to support the weight of pipes, fittings and joints, and their contents, which could lead to the failure of pipes or fittings, which could lead to leakage, which could lead to unsanitary conditions, which could lead to harm to persons.

**Provision: 2.3.4.6.(1)**

---

**Objective**

OP5

**Attributions**

[F20-OP5]

**Intent(s)**

*Intent 1.* To limit the probability that discontinuous support will lead to inadequate support, which could lead to the failure of pipes, fittings or joints, which could lead to leakage, which could lead to damage to the building or facility.

---

**Objective**

OH2

**Attributions**

[F81-OH2.1]

**Intent(s)**

*Intent 1.* To limit the probability that discontinuous support will lead to inadequate support, which could lead to the failure of pipes, fittings or joints, which could lead to leakage, which could lead to unsanitary conditions, which could lead to harm to persons.

**Provision: 2.3.4.6.(2)**

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**Intent(s)**

*Intent 1.* To exempt nominally horizontal piping from the application of Sentence 2.3.4.6.(1) where pipe is adequately supported by hangers.

**Provision: 2.3.4.7.(1)**

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**Objective**

OS3

**Attributions**

[F81-OS3.1]

**Intent(s)**

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## **Intent Statements: NPC 2020**

*Intent 1.* To limit the probability that inadequate support will lead to vent pipes collapsing and falling from the building, which could lead to harm to persons.

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### **Objective**

OP5

### **Attributions**

[F81-OP5]

### **Intent(s)**

*Intent 1.* To limit the probability that inadequate support will lead to vent pipes collapsing, which could lead to damage to roofs or structures on roofs, which could lead to roof leakage, which could lead to damage to the building or facility.

---

## **Provision: 2.3.5.1.(1)**

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### **Objective**

OP5

### **Attributions**

2.3.5.1.(1)(a) [F81-OP5]

### **Intent(s)**

*Intent 1.* To limit the probability that inappropriate backfill materials or practices will lead to damage to piping, which could lead to the failure of pipes, fittings or joints, which could lead to leakage, which could lead to damage to the building or facility.

---

### **Objective**

OH2

### **Attributions**

[F81-OH2.1, OH2.3]

### **Intent(s)**

*Intent 1.* [Clause (a)] To limit the probability that inappropriate backfill materials or practices will lead to damage to piping, which could lead to the failure of pipes, fittings or joints, which could lead to leakage, which could lead to unsanitary conditions, which could lead to harm to persons.

*Intent 2.* [Clause (b)] To limit the probability that inadequate structural protection will lead to damage to piping, which could lead to the failure of pipes, fittings or joints, which could lead to leakage, which could lead to unsanitary conditions, which could lead to harm to persons.

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## **Provision: 2.3.5.2.(1)**

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### **Objective**

OH2

### **Attributions**

[F81-OH2.1, OH2.3]

### **Intent(s)**

*Intent 1.* To limit the probability that an inappropriate installation will lead to walls bearing on pipes, fittings and joints, which could lead to the failure of pipes, fittings or joints, which could lead to leakage, which could lead to unsanitary conditions, which could lead to harm to persons.

---

**Objective**

OP5

**Attributions**

[F81-OP5]

**Intent(s)**

*Intent 1.* To limit the probability that an inappropriate installation will lead to walls bearing on pipes, fittings and joints, which could lead to the failure of pipes, fittings or joints, which could lead to leakage, which could lead to damage to the building or facility.

**Provision: 2.3.5.3.(1)**

---

**Objective**

OP5

**Attributions**

[F81-OP5]

**Intent(s)**

*Intent 1.* To limit the probability that inadequate frost protection will lead to the contents of pipes freezing, which could lead to ruptures in the pipes, which could lead to leakage, which could lead to damage to the building or facility.

---

**Objective**

OH2

**Attributions**

[F81-OH2.1, OH2.3]

**Intent(s)**

*Intent 1.* To limit the probability that inadequate frost protection will lead to the contents of pipes freezing, which could lead to pipes rupturing, which could lead to leakage, which could lead to unsanitary conditions, which could lead to harm to persons.

*Intent 2.* To limit the probability that inadequate frost protection will lead to movement of the pipe bedding and backfill due to frost heaving, which could lead to misalignment and damage to the pipes, fittings or joints, which could lead to leakage, which could lead to unsanitary conditions, which could lead to harm to persons.

**Provision: 2.3.5.4.(1)**

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**Objective**

OH2

**Attributions**

[F81-OH2.1, OH2.3]

**Intent(s)**

*Intent 1.* To limit the probability that inadequate protection will lead to mechanical damage to plumbing systems, which could lead to leakage, which could lead to unsanitary conditions, which could lead to harm to persons.

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## **Intent Statements: NPC 2020**

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### **Objective**

OP5

### **Attributions**

[F81-OP5]

### **Intent(s)**

*Intent 1.* To limit the probability that inadequate protection will lead to mechanical damage to plumbing systems, which could lead to leakage, which could lead to damage to the building or facility.

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### **Provision: 2.3.5.5.(1)**

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### **Objective**

OP5

### **Attributions**

[F81-OP5]

### **Intent(s)**

*Intent 1.* To limit the probability that the inadequate insulation of storm water leaders will lead to the formation of condensation, which could lead to damage to the building or facility.

---

### **Provision: 2.3.6.1.(1)**

---

### **Objective**

OH2

### **Attributions**

[F81-OH2.1, OH2.3] Applies to *drainage systems*.

### **Intent(s)**

*Intent 1.* To limit the probability that failure to conduct tests will lead to undetected leakage in drainage systems, which could lead to unsanitary conditions, which could lead to harm to persons.

---

### **Objective**

OH1

### **Attributions**

[F81-OH1.1] Applies to *venting systems*.

### **Intent(s)**

*Intent 1.* To limit the probability that failure to conduct tests will lead to undetected leakage in venting systems, which could lead to the entry of sewer gases into occupied space, which could lead to negative effects on indoor air quality, which could lead to harm to persons.

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### **Provision: 2.3.6.1.(2)**

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### **Objective**

OH1

### **Attributions**

[F81-OH1.1] Applies to *venting systems*.

### **Intent(s)**

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## Intent Statements: NPC 2020

*Intent 1.* To limit the probability that failure to conduct final inspections will lead to undetected leakage at fixture connections or in venting systems, which could lead to the entry of sewer gases into occupied space, which could lead to negative effects on indoor air quality, which could lead to harm to persons.

---

### Objective

OH2

### Attributions

[F81-OH2.1, OH2.3] Applies to *drainage systems*.

### Intent(s)

*Intent 1.* To limit the probability that failure to conduct final inspections will lead to undetected leakage at fixture connections or in drainage systems, which could lead to unsanitary conditions, which could lead to harm to persons.

---

## Provision: 2.3.6.1.(3)

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### Objective

OH1

### Attributions

[F81-OH1.1]

### Intent(s)

*Intent 1.* To limit the probability that failure to conduct inspections or tests will lead to undetected leakage at fixture connections or in venting systems, which could lead to the entry of sewer gases into occupied space, which could lead to negative effects on indoor air quality, which could lead to harm to persons.

---

### Objective

OH2

### Attributions

[F81-OH2.1, OH2.3]

### Intent(s)

*Intent 1.* To limit the probability that failure to conduct inspections or tests will lead to undetected leakage at fixture connections or in drainage systems, which could lead to unsanitary conditions, which could lead to harm to persons.

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## Provision: 2.3.6.1.(4)

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### Objective

OH1

### Attributions

[F81-OH1.1] Applies to *venting systems*.

### Intent(s)

*Intent 1.* To limit the probability that failure to inspect and test completed venting systems will lead to undetected leakage, which could lead to the entry of sewer gases into occupied space, which could lead to negative effects on indoor air quality, which could lead to harm to persons.

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## **Intent Statements: NPC 2020**

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### **Objective**

OH2

### **Attributions**

[F81-OH2.1, OH2.3] Applies to *drainage systems*.

### **Intent(s)**

*Intent 1.* To limit the probability that failure to inspect and test completed drainage systems will lead to undetected leakage, which could lead to unsanitary conditions, which could lead to harm to persons.

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### **Provision: 2.3.6.1.(5)**

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### **Objective**

OH2

### **Attributions**

[F81-OH2.1, OH2.3]

### **Intent(s)**

*Intent 1.* To limit the probability that inappropriate slopes, obstructions or improperly oriented reducing fittings will lead to sewage backing up, which could lead to unsanitary conditions, which could lead to harm to persons.

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### **Provision: 2.3.6.2.(1)**

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### **Objective**

OH2

### **Attributions**

[F81-OH2.1, OH2.3]

### **Intent(s)**

*Intent 1.* To limit the probability that, except for external leaders and fixture outlet pipes, an inability to withstand required tests will lead to leakage, which could lead to flooding in the building or facility, which could lead to unsanitary conditions, which could lead to harm to persons.

---

### **Objective**

OP5

### **Attributions**

[F81-OP5]

### **Intent(s)**

*Intent 1.* To limit the probability that sanitary drainage systems will be overloaded, which could lead to raw sewage and storm water backing up into the building or facility, which could lead to flooding in the building or facility, which could lead to damage to the building or facility.

**Provision: 2.3.6.2.(2)**

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**Objective**

OH2

**Attributions**

[F81-OH2.1]

**Intent(s)**

*Intent 1.* To limit the probability that an inability to meet a ball test will lead to inappropriate slopes, obstructions or improperly oriented reducing fittings, which could lead to sewage backing up, which could lead to unsanitary conditions, which could lead to harm to persons.

**Provision: 2.3.6.3.(1)**

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**Objective**

OH1

**Attributions**

[F81-OH1.1]

**Intent(s)**

*Intent 1.* To limit the probability that an inability to withstand required tests will lead to leakage, which could lead to the entry of sewer gases into occupied space, which could lead to negative effects on indoor air quality, which could lead to harm to persons.

**Provision: 2.3.6.4.(1)**

---

**Objective**

OH1

**Attributions**

[F81-OH1.1]

**Intent(s)**

*Intent 1.* To limit the probability that inadequate height of tested portions of systems will lead to inadequate head, which could lead to inaccurate results, which could lead to in-service leakage, which could lead to the entry of sewer gases into occupied space, which could lead to negative effects on indoor air quality, which could lead to harm to persons.

---

**Objective**

OH2

**Attributions**

[F81-OH2.1, OH2.3]

**Intent(s)**

*Intent 1.* To limit the probability that inadequate height of tested portions of systems will lead to inadequate head, which could lead to inaccurate results, which could lead to in-service leakage, which could lead to unsanitary conditions, which could lead to harm to persons.

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## **Intent Statements: NPC 2020**

### **Provision: 2.3.6.4.(2)**

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#### **Objective**

OH1

#### **Attributions**

[F81-OH1.1]

#### **Intent(s)**

*Intent 1.* To limit the probability that unsealed openings or an inadequate test duration will lead to inaccurate test results, which could lead to in-service leakage, which could lead to the entry of sewer gases into occupied space, which could lead to negative effects on indoor air quality, which could lead to harm to persons.

---

#### **Objective**

OH2

#### **Attributions**

[F81-OH2.1, OH2.3]

#### **Intent(s)**

*Intent 1.* To limit the probability that unsealed openings or an inadequate test duration will lead to inaccurate test results, which could lead to in-service leakage, which could lead to unsanitary conditions, which could lead to harm to persons.

### **Provision: 2.3.6.5.(1)**

---

#### **Objective**

OH1

#### **Attributions**

[F81-OH1.1]

#### **Intent(s)**

*Intent 1.* To limit the probability that inadequate air pressure or an inadequate test duration will lead to inaccurate test results, which could lead to in-service leakage, which could lead to the entry of sewer gases into occupied space, which could lead to negative effects on indoor air quality, which could lead to harm to persons.

---

#### **Objective**

OH2

#### **Attributions**

[F81-OH2.1, OH2.3]

#### **Intent(s)**

*Intent 1.* To limit the probability that inadequate air pressure or an inadequate test duration will lead to inaccurate test results, which could lead to in-service leakage, which could lead to unsanitary conditions, which could lead to harm to persons.

**Provision: 2.3.6.6.(1)**

---

**Objective**

OH1

**Attributions**

[F81-OH1.1]

**Intent(s)**

*Intent 1.* To limit the probability that an inappropriate test protocol will lead to inaccurate results, which could lead to in-service leakage, which could lead to the entry of sewer gases into occupied space, which could lead to negative effects on indoor air quality, which could lead to harm to persons.

---

**Objective**

OH2

**Attributions**

[F81-OH2.1, OH2.3]

**Intent(s)**

*Intent 1.* To limit the probability that an inappropriate test protocol will lead to inaccurate results, which could lead to in-service leakage, which could lead to unsanitary conditions, which could lead to harm to persons.

**Provision: 2.3.6.6.(2)**

---

**Objective**

OH1

**Attributions**

[F81-OH1.1]

**Intent(s)**

*Intent 1.* To limit the probability that unsealed openings, inadequate air pressure or an inadequate test duration will lead to inaccurate test results, which could lead to in-service leakage, which could lead to the entry of sewer gases into occupied space, which could lead to negative effects on indoor air quality, which could lead to harm to persons.

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**Objective**

OH2

**Attributions**

[F81-OH2.1, OH2.3]

**Intent(s)**

*Intent 1.* To limit the probability that unsealed openings, inadequate air pressure or an inadequate test duration will lead to inaccurate test results, which could lead to in-service leakage, which could lead to unsanitary conditions, which could lead to harm to persons.

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## **Intent Statements: NPC 2020**

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### **Provision: 2.3.6.7.(1)**

#### **Objective**

OH2

#### **Attributions**

[F81-OH2.1, OH2.3]

#### **Intent(s)**

*Intent 1.* To limit the probability that an inadequate ball density will lead to it floating in water-filled pipes, which could lead to an inability to conduct the test, which could lead to inappropriate slopes, obstructions or improperly oriented reducing fittings, which could lead to inadequate sewage flow, which could lead to sewage backing up, which could lead to unsanitary conditions, which could lead to harm to persons.

---

### **Provision: 2.3.6.7.(2)**

#### **Objective**

OH2

#### **Attributions**

[F81-OH2.1, OH2.3]

#### **Intent(s)**

*Intent 1.* To limit the probability that an inadequate ball diameter will lead to an unrealistic test, which could lead to undetected flow problems, which could lead to inadequate flow, which could lead to sewage backing up, which could lead to unsanitary conditions, which could lead to harm to persons.

---

### **Provision: 2.3.7.1.(1)**

#### **Objective**

OP5

#### **Attributions**

[F81-OP5]

#### **Intent(s)**

*Intent 1.* To limit the probability that failure to conduct water or air tests prior to putting systems into service will lead to undetected leakage, which could lead to damage to the building or facility.

---

### **Provision: 2.3.7.1.(2)**

#### **Intent(s)**

*Intent 1.* To clarify that systems may be tested in sections or as a whole.

---

### **Provision: 2.3.7.1.(3)**

#### **Objective**

OP5

#### **Attributions**

[F81-OP5]

**Intent(s)**

*Intent 1.* To limit the probability that a failure to conduct tests will lead to undetected leakage in prefabricated potable water systems, which could lead to damage to the building or facility.

**Provision: 2.3.7.1.(4)**

---

**Objective**

OP5

**Attributions**

[F81-OP5]

**Intent(s)**

*Intent 1.* To limit the probability that the failure to test complete systems, after installation of a prefabricated portion, will lead to undetected leakage in the site-installed portion or at the junction of the two portions, which could lead to damage to the building or facility.

**Provision: 2.3.7.2.(1)**

---

**Objective**

OP5

**Attributions**

[F20-OP5]

**Intent(s)**

*Intent 1.* To limit the probability that inadequate resistance to water pressure will lead to leakage, which could lead to damage to the building or facility.

**Provision: 2.3.7.2.(2)**

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**Objective**

OS3

**Attributions**

[F20, F81-OS3.1]

**Intent(s)**

*Intent 1.* To limit the probability that an inadequate resistance to water pressure will lead to leakage, which could lead to harm to persons.

**Provision: 2.3.7.3.(1)**

---

**Objective**

OP5

**Attributions**

[F81-OP5]

**Intent(s)**

*Intent 1.* To limit the probability that the failure to expel air will lead to an inability to detect slow leaks, which could lead to damage to the building or facility.

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## **Intent Statements: NPC 2020**

### **Provision: 2.3.7.3.(2)**

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#### **Objective**

OH2

#### **Attributions**

[F70-OH2.2]

#### **Intent(s)**

*Intent 1.* To limit the probability that the use of non-potable water for testing will lead to contamination of pipes, which could lead to contamination of potable water, which could lead to harm to persons.

### **Provision: 2.4.1.1.(1)**

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#### **Intent(s)**

*Intent 1.* To state the application of Section 2.4.

### **Provision: 2.4.2.1.(1)**

---

#### **Objective**

OH2

#### **Attributions**

[F72-OH2.1] Applies to *fixtures* that are *directly connected to sanitary drainage systems*.

#### **Intent(s)**

*Intent 1.* To limit the probability that waste will be improperly directed, which could lead to backflow, which could lead to exposure to contaminated waste, which could lead to harm to persons.

---

#### **Objective**

OH2

#### **Attributions**

2.4.2.1.(1)(a) [F81-OH2.2]

#### **Intent(s)**

*Intent 1.* To exempt drinking fountains from having to connect directly to a sanitary drainage system because the discharge is clear and odour free, and would not cause contamination as long as backflow protection is provided, where there is a direct connection to a storm drainage system.

This is to limit the probability of backflow, which could lead to exposure to contaminated waste, which could lead to harm to persons.

---

#### **Objective**

OH2

#### **Attributions**

2.4.2.1.(1)(b) [F81-OH2.2]

#### **Intent(s)**

*Intent 1.* To exempt drainage pans from having to connect directly to a sanitary drainage system because the discharge is clear and odour free, and would not cause contamination as long as backflow protection is provided, where there is a direct connection to a storm drainage system.

This is to limit the probability of backflow, which could lead to exposure to contaminated waste, which could lead to harm to persons.

---

**Objective**

OH2

**Attributions**

2.4.2.1.(1)(c) [F81-OH2.1]

**Intent(s)**

*Intent 1.* To exempt floor drains from having to connect to sanitary drainage systems under circumstances where their discharge is clear and odour free and would not cause contamination.

This is to limit the probability that backflow will lead to exposure to contaminated waste, which could lead to harm to persons.

---

**Objective**

OH2

**Attributions**

2.4.2.1.(1)(d) [F81-OH2.1]

**Intent(s)**

*Intent 1.* To exempt fixtures or appliances that discharge clear-water waste from being connected to sanitary drainage systems because the discharge is clear and odour free and would not cause contamination.

This is to limit the probability that backflow will lead to exposure to contaminated waste, which could lead to harm to persons.

---

**Objective**

OH2

**Attributions**

2.4.2.1.(1)(e) [F81-OH2.1]

**Intent(s)**

*Intent 1.* To exempt devices that discharge clear-water waste from being directly connected to the drainage system because the discharge is clear and odour free and would not cause contamination if there is backflow.

This is to limit the probability that backflow will lead to exposure to contaminated waste, which could lead to harm to persons.

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**Provision: 2.4.2.1.(2)**

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**Objective**

OH1

**Attributions**

[F81-OH1.1]

**Intent(s)**

*Intent 1.* To limit the probability that inadequate distance between sanitary drainage pipes and other nominally horizontal sanitary drainage pipes or nominally horizontal offsets in stacks that receive high volumes or velocity of discharge will lead to trap seal failure, which could lead to the entry of sewer

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## **Intent Statements: NPC 2020**

gases into occupied space, which could lead to negative effects on indoor air quality, which could lead to harm to persons.

### **Provision: 2.4.2.1.(3)**

---

#### **Objective**

OH1

#### **Attributions**

[F81-OH1.1]

#### **Intent(s)**

*Intent 1.* To limit the probability that flushing flow of water closets will lead to siphonage of water from fixture traps, which could lead to the entry of sewer gases into occupied space, which could lead to negative effects on indoor air quality, which could lead to harm to persons.

### **Provision: 2.4.2.1.(4)**

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#### **Objective**

OH1

#### **Attributions**

[F81-OH1.1]

#### **Intent(s)**

*Intent 1.* To limit the probability that the flow of sudsy water from clothes washers will lead to the blockage of vents, which could lead to water being siphoned from fixture traps, which could lead to the entry of sewer gases into occupied space, which could lead to negative effects on indoor air quality, which could lead to harm to persons.

### **Provision: 2.4.2.1.(5)**

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#### **Objective**

OH1

#### **Attributions**

[F81-OH1.1]

#### **Intent(s)**

*Intent 1.* To limit the probability that the flow of sudsy water from clothes washers will lead to the blockage of vents, which could lead to water being siphoned from fixture traps, which could lead to the entry of sewer gases into occupied space, which could lead to negative effects on indoor air quality, which could lead to harm to persons.

### **Provision: 2.4.2.2.(1)**

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#### **Objective**

OH2

#### **Attributions**

[F81-OH2.2]

#### **Intent(s)**

*Intent 1.* To limit the probability of backflow from drainage systems into rainwater tanks, which could lead to contamination of water in the tank, which could lead to unsanitary conditions, which could lead to harm to persons.

---

**Provision: 2.4.2.3.(1)**

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**Objective**

OH2

**Attributions**

[F81-OH2.2]

**Intent(s)**

*Intent 1.* To exempt certain fixtures that discharge clear waste from the requirement for an indirect connection in Clause 2.4.2.1.(1)(e), and to permit direct connection to a branch that:

- has a size of not less than NPS 1¼, and
- is terminated above the flood level rim of a directly connected fixture to form an air break.

This is to limit the probability of backflow, which could lead to sewage contamination of clear water, which could lead to unsanitary conditions, which could lead to harm to persons.

---

**Provision: 2.4.2.3.(2)**

---

**Objective**

OH2

**Attributions**

[F81-OH2.1, OH2.4]

**Intent(s)**

*Intent 1.* To exempt certain fixture drains from the requirement for an indirect connection in Sub-clauses 2.4.2.1.(1)(e)(i) and 2.4.2.1.(1)(e)(ii), and to permit direct connection to pipes that:

- are terminated to form an air break above the flood level rim of fixtures that are directly connected to sanitary drainage systems, and
- are extended through roofs when fixtures on 3 or more storeys are connected to them.

This is to limit the probability of backflow protection, which could lead to sewage contamination of food preparation fixtures or sterilization devices, which could lead to unsanitary conditions, which could lead to harm to persons.

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**Provision: 2.4.2.3.(3)**

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**Objective**

OH2

**Attributions**

[F81-OH2.4]

**Intent(s)**

*Intent 1.* To exempt certain fixture drains from the requirement for an indirect connection in Sub-clauses 2.4.2.1.(1)(e)(iii) to 2.4.2.1.(1)(e)(iv), and to permit direct connection to pipes that:

- are terminated to form an air break above the flood level rim of fixtures that are directly connected to storm drainage systems, and

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## **Intent Statements: NPC 2020**

- are extended through roofs when fixtures on 3 or more storeys are connected to them.

This is to limit the probability that backflow will lead to sewage contamination of clear-water waste fixtures and devices, which could lead to unsanitary conditions, which could lead to harm to persons.

---

### **Provision: 2.4.3.1.(1)**

#### **Objective**

OH2

#### **Attributions**

[F81-OH2.4]

#### **Intent(s)**

*Intent 1.* To limit the probability that the absorption of urine will lead to the contamination of wall or floor surfaces, which could lead to unsanitary conditions, which could lead to harm to persons.

---

### **Provision: 2.4.3.2.(1)**

#### **Objective**

OH2

#### **Attributions**

[F81-OH2.1, OH2.4]

#### **Intent(s)**

*Intent 1.* To limit the probability that an inappropriate location of indirect connections will lead to an inability to detect flooding or sewage surcharge, which could lead to unsanitary conditions, which could lead to harm to persons.

---

### **Provision: 2.4.3.3.(1)**

#### **Objective**

OH2

#### **Attributions**

[F81-OH2.1]

#### **Intent(s)**

*Intent 1.* To limit the probability that the inappropriate location of fixtures that discharge organic waste will lead to blockages within grease interceptors, which could lead to waste water surcharge, which could lead to unsanitary conditions, which could lead to harm to persons.

---

### **Provision: 2.4.3.3.(2)**

#### **Intent(s)**

*Intent 1.* To supersede the application of Sentence 2.4.3.3.(1) and allow the installation of organic solids interceptors where they will not create unsanitary conditions.

**Provision: 2.4.3.4.(1)**

---

**Objective**

OS1

**Attributions**

[F81-OS1.1]

**Intent(s)**

*Intent 1.* To limit the probability that a discharge of flammable, dangerous or toxic chemicals into drainage systems will lead to explosions or fires, which could lead to harm to persons.

---

**Objective**

OH5

**Attributions**

[F43-OH5]

**Intent(s)**

*Intent 1.* To limit the probability that a discharge of flammable, dangerous or toxic chemicals into drainage systems will lead to the release of hazardous substances, which could lead to harm to persons.

**Provision: 2.4.3.5.(1)**

---

**Objective**

OH2

**Attributions**

[F72-OH2.1]

**Intent(s)**

*Intent 1.* To limit the probability that a macerating toilet system will be installed where connection to a gravity sanitary drainage system is available, which could lead to unsanitary conditions, which could lead to harm to persons.

**Provision: 2.4.3.6.(1)**

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**Objective**

OP5

**Attributions**

2.4.3.6.(1)(a) [F62-OP5]

**Intent(s)**

*Intent 1.* To limit the probability that, where a drain is provided, water will accumulate in the elevator pit due to a blockage in the drainage system, which could lead to the accumulation of moisture or flooding, which could lead to damage to the building or facility.

---

**Objective**

OH2

**Attributions**

2.4.3.6.(1)(b) [F81-OH2.1]

**Intent(s)**

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## **Intent Statements: NPC 2020**

*Intent 1.* To limit the probability that a backup of the drainage system will lead to backflow into the elevator pit, which could lead to unsanitary conditions, which could lead to harm to persons.

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### **Provision: 2.4.4.1.(1)**

#### **Objective**

OH2

#### **Attributions**

[F81-OH2.1]

#### **Intent(s)**

*Intent 1.* To limit the probability that an inability to treat sewage or waste will lead to damage or blockage of sewage disposal systems, which could lead to leakage or sewage backing up, which could lead to unsanitary conditions, which could lead to harm to persons.

---

### **Provision: 2.4.4.2.(1)**

#### **Objective**

OH2

#### **Attributions**

[F81-OH2.1]

#### **Intent(s)**

*Intent 1.* To limit the probability that high-temperature discharge will lead to damage to pipes or joints, which could lead to blockages, which could lead to leakage or sewage backing up, which could lead to unsanitary conditions, which could lead to harm to persons.

---

### **Provision: 2.4.4.3.(1)**

#### **Objective**

OH2

#### **Attributions**

[F81-OH2.1]

#### **Intent(s)**

*Intent 1.* To limit the probability that entry of materials that could congeal or solidify in drainage systems will lead to blockage, which could lead to sewage backing up, which could lead to unsanitary conditions, which could lead to harm to persons.

---

### **Provision: 2.4.4.3.(2)**

#### **Objective**

OS1

#### **Attributions**

[F81-OS1.1]

#### **Intent(s)**

*Intent 1.* To limit the probability that the discharge into drainage systems of waste containing oil or gasoline will lead to explosions or fires, which could lead to harm to persons.

---

**Objective**

OH5

**Attributions**

[F43-OH5]

**Intent(s)**

*Intent 1.* To limit the probability that the discharge into drainage systems of waste containing oil or gasoline will lead to harm to persons.

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**Provision: 2.4.4.3.(3)**

---

**Objective**

OH2

**Attributions**

[F81-OH2.1]

**Intent(s)**

*Intent 1.* To limit the probability that the discharge of materials that would settle and accumulate in drainage systems will lead to blockage, which could lead to sewage backing up, which could lead to unsanitary conditions, which could lead to harm to persons.

---

**Provision: 2.4.4.3.(4)**

---

**Objective**

OH2

**Attributions**

[F81-OH2.1]

**Intent(s)**

*Intent 1.* To limit the probability that interceptors with an inadequate capacity will lead to blockage of drainage systems, which could lead to sewage backing up, which could lead to unsanitary conditions, which could lead to harm to persons.

---

**Provision: 2.4.4.4.(1)**

---

**Objective**

OS3

**Attributions**

[F80-OS3.4]

**Intent(s)**

*Intent 1.* To limit the probability that, should backflow occur, a lack of protection by traps or indirect connections will lead to exposure to corrosive or acid waste or fumes, which could lead to harm to persons.

*Intent 2.* To limit the probability that the discharge of full-strength corrosive or acid waste into drainage systems will lead to corrosive damage to pipes or fittings, which could lead to leakage, which could lead to the entry of corrosive or acid gases into occupied space, which could lead to harm to persons.

---

## **Intent Statements: NPC 2020**

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### **Provision: 2.4.4.4.(2)**

#### **Objective**

OH5

#### **Attributions**

[F43-OH5]

#### **Intent(s)**

*Intent 1.* To limit the probability that an inability to neutralize corrosive or acid waste will lead to the discharge of full-strength corrosive or acid waste into drainage systems, which could lead to harm to persons.

---

#### **Objective**

OH2

#### **Attributions**

[F80-OH2.1]

#### **Intent(s)**

*Intent 1.* To limit the probability that an inability to neutralize corrosive or acid waste will lead to the discharge of full-strength corrosive or acid waste or fumes into drainage systems, which could lead to corrosive damage to pipes or fittings, which could lead to leakage, which could lead to unsanitary conditions, which could lead to harm to persons.

---

### **Provision: 2.4.5.1.(1)**

#### **Objective**

OH1

#### **Attributions**

[F81-OH1.1]

#### **Intent(s)**

*Intent 1.* To limit the probability that sharing traps among multiple fixtures will lead to trap seal failure, which could lead to inadequate protection of fixtures, which could lead to the entry of sewer gases into occupied space, which could lead to negative effects on indoor air quality, which could lead to harm to persons.

---

### **Provision: 2.4.5.1.(2)**

#### **Intent(s)**

*Intent 1.* To exempt certain fixtures from the requirement of Sentence 2.4.5.1.(1) for separate traps, and permit the use of a single trap where a number of traps would be required, where traps serve compartments of the same fixture or similar fixtures that are in the same room.

---

### **Provision: 2.4.5.1.(3)**

#### **Intent(s)**

*Intent 1.* To exempt certain fixtures from the requirement of Sentence 2.4.5.1.(1) for separate traps, and permit the use of a single trap where a number of traps would ordinarily be required, where:

---

## **Intent Statements: NPC 2020**

- traps serve compartments of similar drains or fixtures that are in the same room, and
- there is no likelihood of discharge that could decay and produce toxic substances.

---

### **Provision: 2.4.5.1.(4)**

---

#### **Intent(s)**

*Intent 1.* To exempt certain fixtures from the requirement of Sentence 2.4.5.1.(1) for separate traps, where the fixtures are otherwise protected and where they discharge only clear-water waste. An exception is made for drinking fountains which require individual trap protection to avoid backflow of air and gases from the indirectly connected drain pipe to the drinking fountain.

---

### **Provision: 2.4.5.1.(5)**

---

#### **Intent(s)**

*Intent 1.* To modify the application of Sentence 2.4.5.1.(1) and consider interceptors that have an appropriate water seal depth to serve as a trap.

---

### **Provision: 2.4.5.1.(6)**

---

#### **Objective**

OH1

#### **Attributions**

[F81-OH1.1]

#### **Intent(s)**

*Intent 1.* To limit the probability that an inadequate connection of the discharge line will lead to trap seal failure, which could lead to the entry of sewer gases into occupied space, which could lead to negative effects on indoor air quality, which could lead to harm to persons.

---

#### **Objective**

OP5

#### **Attributions**

[F81-OP5]

#### **Intent(s)**

*Intent 1.* To limit the probability that waste will be improperly directed, which could lead to backflow, which could lead to flooding, which could lead to damage to the building or facility.

---

### **Provision: 2.4.5.2.(1)**

---

#### **Objective**

OH1

#### **Attributions**

[F81-OH1.1]

#### **Intent(s)**

---

## **Intent Statements: NPC 2020**

*Intent 1.* To limit the probability that a direct connection between storm and sanitary drainage systems will lead to the entry of sewer gases into occupied space, which could lead to negative effects on indoor air quality, which could lead to harm to persons.

*Intent 2.* To exempt the upper end of leaders that terminate:

- at roofs that are used only for weather protection,
- not less than 1 m above or not less than 3.5 m in any other direction from air inlets, openable windows or doors, and
- not less than 1.8 m from property lines.

---

### **Provision: 2.4.5.2.(2)**

#### **Objective**

OH1

#### **Attributions**

[F81-OH1.1]

#### **Intent(s)**

*Intent 1.* To exempt traps from the requirement of Sentence 2.5.1.1.(1) for a vent pipe because storm drainage systems are inherently vented.

This is to limit the probability that a direct connection between floor drains that are not vented and storm drainage systems will lead to the entry of sewer gases into occupied space, which could lead to negative effects on indoor air quality, which could lead to harm to persons.

---

### **Provision: 2.4.5.2.(3)**

#### **Objective**

OP5

#### **Attributions**

[F81-OP5]

#### **Intent(s)**

*Intent 1.* To limit the probability that the lack of a trap will lead to the formation of ice plugs, which could lead to the blockage of drain inlets or grilles, which could lead to flooding, which could lead to damage to the building or facility.

---

### **Provision: 2.4.5.3.(1)**

#### **Objective**

OH2

#### **Attributions**

[F81-OH2.1]

#### **Intent(s)**

*Intent 1.* To limit the probability that the absence of an appropriately placed trap will lead to the entry of sewer gases into the subsoil drainage piping, which could lead to the entry of sewer gases into occupied space, which could lead to unsanitary conditions, which could lead to harm to persons.

---

**Objective**

OH1

**Attributions**

[F81-OH1.1]

**Intent(s)**

*Intent 1.* To limit the probability that the absence of an appropriately placed trap will lead to the entry of sewer gases into the subsoil drainage piping, which could lead to the entry of sewer gases into occupied space, which could lead to negative effects on indoor air quality, which could lead to harm to persons.

---

**Provision: 2.4.5.4.(1)**

---

**Objective**

OH2

**Attributions**

[F81-OH2.1]

**Intent(s)**

*Intent 1.* To limit the probability that the absence of cleanouts, or inappropriately placed cleanouts, will lead to an inability to clean building traps, which could lead to a blockage, which could lead to backflow and spillage, which could lead to unsanitary conditions, which could lead to harm to persons.

---

**Provision: 2.4.5.5.(1)**

---

**Objective**

OH1

**Attributions**

[F81-OH1.1]

**Intent(s)**

*Intent 1.* To limit the probability that the loss of a trap water seal will lead to the entry of sewer gases into occupied space, which could lead to negative effects on indoor air quality, which could lead to harm to persons.

---

**Provision: 2.4.6.1.(1)**

---

**Objective**

OH2

**Attributions**

[F81-OH2.1]

**Intent(s)**

*Intent 1.* To limit the probability that overloading sanitary drainage pipes will lead to a surcharge of such combined drainage systems, which could lead to backflow and spillage, which could lead to unsanitary conditions, which could lead to harm to persons.

---

## **Intent Statements: NPC 2020**

---

### **Provision: 2.4.6.1.(2)**

#### **Objective**

OH2

#### **Attributions**

[F81-OH2.1]

#### **Intent(s)**

*Intent 1.* To limit the probability of overloading waste-treatment systems, which could lead to backflow and spillage, which could lead to unsanitary conditions, which could lead to harm to persons.

---

### **Provision: 2.4.6.1.(3)**

#### **Objective**

OH1

#### **Attributions**

[F81-OH1.1]

#### **Intent(s)**

*Intent 1.* To limit the probability that:

- unused open ends will lead to the entry of sewer gases into occupied space, or that
- inappropriately graded dead ends will lead to septic accumulation in drainage systems, which could lead to the generation of noxious gases.

This is to limit the probability of negative effects on indoor air quality, which could lead to harm to persons.

---

### **Provision: 2.4.6.2.(1)**

#### **Objective**

OH2

#### **Attributions**

[F81-OH2.2]

#### **Intent(s)**

*Intent 1.* To limit the probability that the leakage of sewage from pipes will lead to contamination of potable water, or food-handling or processing equipment, which could lead to unsanitary conditions, which could lead to harm to persons.

---

### **Provision: 2.4.6.3.(1)**

#### **Objective**

OH2

#### **Attributions**

[F81-OH2.1]

#### **Intent(s)**

*Intent 1.* To limit the probability that the lack of a suitable receptacle for receiving sewage from fixtures installed below the level of a building sewer will lead to an inability to drain the fixtures, which could lead to the drainage system backing up, which could lead to unsanitary conditions, which could lead to harm to persons.

**Provision: 2.4.6.3.(2)**

---

**Objective**

OH2

**Attributions**

[F81-OH2.1] Applies to the watertightness of sumps or tanks.

**Intent(s)**

*Intent 1.* To limit the probability that inadequate watertightness will lead to leakage, which could lead to unsanitary conditions, which could lead to harm to persons.

---

**Objective**

OH1

**Attributions**

[F40, F81-OH1.1]

**Intent(s)**

*Intent 1.* To limit the probability that:

- inadequate airtightness will lead to leakage, or
- inadequate venting will lead to the buildup of sewer gases within tanks or sumps, which could lead to back pressure, which could lead to resistance to flow.

This is to limit the probability of the entry of sewer gases into occupied space, which could lead to negative effects on indoor air quality, which could lead to harm to persons.

**Provision: 2.4.6.3.(3)**

---

**Objective**

OH2

**Attributions**

[F40, F81-OH2.1]

**Intent(s)**

*Intent 1.* To limit the probability that inadequate watertightness will lead to leakage, which could lead to unsanitary conditions, which could lead to harm to persons.

---

**Objective**

OH1

**Attributions**

[F40, F81-OH1.1]

**Intent(s)**

*Intent 1.* To limit the probability that inadequate airtightness will lead to leakage, which could lead to the entry of subsoil gases into occupied space, which could lead to negative effects on indoor air quality, which could lead to harm to persons.

---

## **Intent Statements: NPC 2020**

---

### **Provision: 2.4.6.3.(4)**

#### **Objective**

OH2

#### **Attributions**

[F81-OH2.1]

#### **Intent(s)**

*Intent 1.* To limit the probability that the lack of a means to transfer the contents of sumps or tanks into building drains or building sewers will lead to the drainage system backing up, which could lead to unsanitary conditions, which could lead to harm to persons.

---

### **Provision: 2.4.6.3.(5)**

#### **Objective**

OH2

#### **Attributions**

[F81-OH2.1]

#### **Intent(s)**

*Intent 1.* To limit the probability that an inadequate sump capacity will lead to overflowing sumps, which could lead to the drainage system backing up, which could lead to unsanitary conditions, which could lead to harm to persons.

---

### **Provision: 2.4.6.3.(6)**

#### **Objective**

OH2

#### **Attributions**

[F81-OH2.1]

#### **Intent(s)**

*Intent 1.* To limit the probability that the inappropriate location of discharge pipes from sewage pumps or ejectors will lead to overloading building drains upstream of building traps, which could lead to the drainage system backing up, which could lead to unsanitary conditions, which could lead to harm to persons.

---

### **Provision: 2.4.6.3.(7)**

#### **Objective**

OH2

#### **Attributions**

[F81-OH2.1]

#### **Intent(s)**

*Intent 1.* To limit the probability that, when pumps are not running, the lack of check valves will lead to backflow from sewers into sumps or tanks, which could lead to the drainage system backing up, which could lead to unsanitary conditions, which could lead to harm to persons.

**Provision: 2.4.6.3.(8)**

---

**Objective**

OH2

**Attributions**

[F81-OH2.1]

**Intent(s)**

*Intent 1.* To limit the probability that inadequate sizing of discharge piping will lead to pump failure, which could lead to the drainage system backing up, which could lead to surcharge, which could lead to unsanitary conditions, which could lead to harm to persons.

**Provision: 2.4.6.4.(1)**

---

**Objective**

OH2

**Attributions**

[F81-OH2.1]

**Intent(s)**

*Intent 1.* To limit the probability that inappropriate backup protection will lead to sewage backflow into subsoil drainage pipes, which could lead to unsanitary conditions, which could lead to harm to persons.

**Provision: 2.4.6.4.(2)**

---

**Objective**

OH2

**Attributions**

[F81-OH2.1]

**Intent(s)**

*Intent 1.* To limit the probability that a backup of public sewers will lead to backflow into building drainage systems, which could lead to unsanitary conditions, which could lead to harm to persons.

**Provision: 2.4.6.4.(3)**

---

**Objective**

OH2

**Attributions**

[F81-OH2.1]

**Intent(s)**

*Intent 1.* To limit the probability that a backup of public sewers will lead to backflow into building drainage systems where fixtures are located below the level of the adjoining street, which could lead to unsanitary conditions, which could lead to harm to persons.

**Provision: 2.4.6.4.(4)**

---

---

## **Intent Statements: NPC 2020**

### **Intent(s)**

*Intent 1.* To modify the application of Sentence 2.4.6.4.(3) and allow the installation of the backwater valve on the branch.

---

### **Provision: 2.4.6.4.(5)**

#### **Objective**

OH1

#### **Attributions**

[F81-OH1.1]

### **Intent(s)**

*Intent 1.* To limit the probability that a restriction of air flow between sewers and venting systems will lead to inadequate venting, which could lead to the entry of sewer gases into occupied space, which could lead to negative effects on indoor air quality, which could lead to harm to persons.

---

#### **Objective**

OH2

#### **Attributions**

[F81-OH2.1]

### **Intent(s)**

*Intent 1.* To limit the probability of waste flow in building drains, which could lead to the drainage system backing up, which could lead to surcharge, which could lead to unsanitary conditions, which could lead to harm to persons.

---

### **Provision: 2.4.6.4.(6)**

#### **Objective**

OH2

#### **Attributions**

[F81-OH2.1]

### **Intent(s)**

*Intent 1.* To limit the probability of a restriction of waste flow in building drains or sewer systems, which could lead to the drainage system backing up, which could lead to surcharge, which could lead to unsanitary conditions, which could lead to harm to persons.

---

#### **Objective**

OH1

#### **Attributions**

[F81-OH1.1]

### **Intent(s)**

*Intent 1.* To limit the probability that a restriction of air flow between sewers and venting systems will lead to inadequate venting, which could lead to the entry of sewer gases into occupied space, which could lead to negative effects on indoor air quality, which could lead to harm to persons.

**Provision: 2.4.6.5.(1)**

---

**Objective**

OH2

**Attributions**

[F81-OH2.1]

**Intent(s)**

*Intent 1.* To limit the probability that:

- an inadequate drain pipe size will lead to frost-related blockage, which could lead to flow restriction, which could lead to sewage backup,
- an inappropriate terminal connection will lead to unauthorized disconnection, an inability to withstand repeated connection and disconnection, or an inadequate seal, which could lead to leakage at the connection,
- inadequate protection from mechanical damage or frost-heave, or soil-settlement-related damage, will lead to leakage,
- inappropriate termination will lead to system failure, or
- the design or construction is inappropriate, which could lead to system failure or leakage.

This is to limit the probability of unsanitary conditions, which could lead to harm to persons.

**Provision: 2.4.7.1.(1)**

---

**Objective**

OH2

**Attributions**

[F81-OH2.1]

**Intent(s)**

*Intent 1.* To limit the probability that a lack of cleanouts will lead to an inability to clear drainage system blockages, which could lead to a backup, which could lead to a waste water surcharge, which could lead to unsanitary conditions, which could lead to harm to persons.

**Provision: 2.4.7.1.(2)**

---

**Objective**

OH2

**Attributions**

[F81-OH2.1]

**Intent(s)**

*Intent 1.* To limit the probability that inappropriately located cleanouts will lead to an inability to clear drainage system blockages, which could lead to a backup, which could lead to a waste water surcharge, which could lead to unsanitary conditions, which could lead to harm to persons.

---

## **Intent Statements: NPC 2020**

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### **Provision: 2.4.7.1.(3)**

#### **Objective**

OH2

#### **Attributions**

[F81-OH2.1]

#### **Intent(s)**

*Intent 1.* To limit the probability that the lack of cleanouts, or inappropriately located cleanouts, will lead to an inability to clear blockages in horizontal branches or drains serving leaders, which could lead to a backup, which could lead to a waste water surcharge, which could lead to unsanitary conditions, which could lead to harm to persons.

---

### **Provision: 2.4.7.1.(4)**

#### **Objective**

OH2

#### **Attributions**

[F81-OH2.1]

#### **Intent(s)**

*Intent 1.* To limit the probability that inadequately sized cleanouts for large-diameter sewers will lead to drainage system blockages, which could lead to a backup, which could lead to a waste water surcharge, which could lead to unsanitary conditions, which could lead to harm to persons.

---

### **Provision: 2.4.7.1.(5)**

#### **Objective**

OH2

#### **Attributions**

[F81-OH2.1]

#### **Intent(s)**

*Intent 1.* To limit the probability that excessive direction or slope changes in small-diameter sewers will lead to an inability to clear system blockages, which could lead to a backup, which could lead to a waste water surcharge, which could lead to unsanitary conditions, which could lead to harm to persons.

---

### **Provision: 2.4.7.1.(6)**

#### **Objective**

OH2

#### **Attributions**

[F81-OH2.1]

#### **Intent(s)**

*Intent 1.* To limit the probability that an inappropriate or inaccessible location for cleanouts will lead to an inability of sewer cleaning equipment to clean adequately, which could lead to drainage system blockages, which could lead to a backup, which could lead to a waste water surcharge, which could lead to unsanitary conditions, which could lead to harm to persons.

**Provision: 2.4.7.1.(7)**

---

**Objective**

OH2

**Attributions**

[F81-OH2.1]

**Intent(s)**

*Intent 1.* To limit the probability that the lack of cleanouts for drainage systems, or inappropriately located cleanouts for drainage systems, will lead to an inability to remove blockages in the stack, which could lead to a backup, which could lead to a waste water surcharge, which could lead to unsanitary conditions, which could lead to harm to persons.

**Provision: 2.4.7.1.(8)**

---

**Objective**

OH2

**Attributions**

[F81-OH2.1]

**Intent(s)**

*Intent 1.* To limit the probability that the lack of cleanouts will lead to an inability to clear overflow material not intercepted by interceptors, which could lead to sanitary drainage system blockages, which could lead to a backup, which could lead to a waste water surcharge, which could lead to unsanitary conditions, which could lead to harm to persons.

**Provision: 2.4.7.1.(9)**

---

**Objective**

OH2

**Attributions**

[F81-OH2.1]

**Intent(s)**

*Intent 1.* To limit the probability that an excessive change of direction will lead to an inability to clear drains that carry food waste, which could lead to sanitary drainage system blockages, which could lead to a backup, which could lead to a waste water surcharge, which could lead to unsanitary conditions, which could lead to harm to persons.

**Provision: 2.4.7.1.(10)**

---

**Objective**

OH2

**Attributions**

[F82-OH2.1]

**Intent(s)**

*Intent 1.* To limit the probability that failure of the cleanout for fixture drains will lead to drainage system blockages, which could lead to a backup, which could lead to a waste water surcharge, which could lead to unsanitary conditions, which could lead to harm to persons.

---

## **Intent Statements: NPC 2020**

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### **Objective**

OP5

### **Attributions**

[F82-OP5]

### **Intent(s)**

*Intent 1.* To limit the probability that failure of the cleanout for fixture drains will lead to lead to drainage system blockages, which could lead to a backup, which could lead to a waste water surcharge, which could lead to damage to the building or facility.

---

### **Provision: 2.4.7.1.(11)**

---

### **Objective**

OH2

### **Attributions**

[F81-OH2.1]

### **Intent(s)**

*Intent 1.* To limit the probability that multiple directional changes of a horizontal building drain will lead to drainage system blockages, which could lead to a backup, which could lead to a waste water surcharge, which could lead to unsanitary conditions, which could lead to harm to persons.

---

### **Objective**

OP5

### **Attributions**

[F81-OP5]

### **Intent(s)**

*Intent 1.* To limit the probability that multiple directional changes of a horizontal building drain will lead to drainage system blockages, which could lead to a backup, which could lead to a waste water surcharge, which could lead to damage to the building or facility.

---

### **Provision: 2.4.7.2.(1)**

---

### **Objective**

OH2

### **Attributions**

[F81-OH2.1]

### **Intent(s)**

*Intent 1.* To limit the probability that inadequate size or excessive spacing of cleanouts will lead to an inability to clear portions of pipes, which could lead to sanitary drainage system blockages, which could lead to a backup, which could lead to a waste water surcharge, which could lead to unsanitary conditions, which could lead to harm to persons.

**Provision: 2.4.7.2.(2)**

---

**Objective**

OH2

**Attributions**

[F81-OH2.1]

**Intent(s)**

*Intent 1.* To limit the probability that excessive spacing between manholes will lead to an inability of cleaning equipment to clear drainage systems, which could lead to sanitary drainage system blockages, which could lead to a backup, which could lead to a waste water surcharge, which could lead to unsanitary conditions, which could lead to harm to persons.

**Provision: 2.4.7.2.(3)**

---

**Objective**

OH2

**Attributions**

[F81-OH2.1]

**Intent(s)**

*Intent 1.* To limit the probability that an excessive developed length will lead to an inability of cleaning equipment to clear drainage system blockages due to equipment limitations, which could lead to a backup, which could lead to a waste water surcharge, which could lead to unsanitary conditions, which could lead to harm to persons.

**Provision: 2.4.7.2.(4)**

---

**Objective**

OH2

**Attributions**

[F81-OH2.1]

**Intent(s)**

*Intent 1.* To limit the probability that an excessive developed length will lead to an inability to clear sewer system blockages, which could lead to a backup, which could lead to a waste water surcharge, which could lead to unsanitary conditions, which could lead to harm to persons.

**Provision: 2.4.7.2.(5)**

---

**Objective**

OH2

**Attributions**

[F81-OH2.1]

**Intent(s)**

*Intent 1.* To limit the probability that inappropriately oriented, unidirectional cleanouts will lead to an inability to clear drainage system blockages, which could lead to a backup, which could lead to a waste water surcharge, which could lead to unsanitary conditions, which could lead to harm to persons.

---

## **Intent Statements: NPC 2020**

### **Provision: 2.4.7.3.(1)**

---

#### **Objective**

OS3

#### **Attributions**

[F20-OS3.1]

#### **Intent(s)**

*Intent 1.* To limit the probability that inadequate structural strength will lead to an inability to support expected structural loads, which could lead to the collapse of manholes, which could lead to harm to persons.

### **Provision: 2.4.7.3.(2)**

---

#### **Objective**

OH1

#### **Attributions**

2.4.7.3.(2)(a), 2.4.7.3.(2)(c) [F81-OH1.1]

#### **Intent(s)**

*Intent 1.* To limit the probability that inadequate airtightness of manhole covers will lead to the entry of sewer gases into occupied space, which could lead to negative effects on indoor air quality, which could lead to harm to persons.

*Intent 2.* To limit the probability that inadequate venting will lead to a pressure buildup of sewer gases in manholes, which could lead to the entry of sewer gases into occupied space, which could lead to negative effects on indoor air quality, which could lead to harm to persons.

---

#### **Objective**

OS1

#### **Attributions**

2.4.7.3.(2)(a), 2.4.7.3.(2)(c) [F81-OS1.1]

#### **Intent(s)**

*Intent 1.* To limit the probability that inadequate airtightness of manhole covers will lead to the accumulation and subsequent ignition of flammable sewer gases in occupied space, which could lead to harm to persons.

*Intent 2.* To limit the probability that inadequate venting will lead to a pressure buildup of flammable sewer gases in manholes, which could lead to ignition of the gases from a nearby ignition source, which could lead to harm to persons.

---

#### **Objective**

OS3

#### **Attributions**

2.4.7.3.(2)(b) [F20-OS3.1]

#### **Intent(s)**

*Intent 1.* To limit the probability that inadequate design of ladders will lead to a collapse under loads imposed by the environment and the maintenance or inspection personnel, which could lead to harm to persons.

**Provision: 2.4.7.3.(3)**

---

**Objective**

OS3

**Attributions**

[F30-OS3.1]

**Intent(s)**

*Intent 1.* To limit the probability that inadequate size or inappropriate taper orientation will lead to workers becoming wedged or confined in manholes, which could lead to harm to persons.

**Provision: 2.4.7.3.(4)**

---

**Objective**

OH2

**Attributions**

[F81-OH2.1]

**Intent(s)**

*Intent 1.* To limit the probability that an inappropriate design will lead to the accumulation of solids or standing sewage in manholes, which would become septic and cause blockage, which could lead to sanitary drainage system backup, which could lead to a surcharge, which could lead to unsanitary conditions, which could lead to harm to persons.

**Provision: 2.4.7.4.(1)**

---

**Objective**

OH2

**Attributions**

[F81-OH2.1]

**Intent(s)**

*Intent 1.* To limit the probability that an inappropriate design for cleanouts or access covers will lead to inadequate accessibility, which could lead to an inability to clear drainage system blockages, which could lead to a surcharge, which could lead to unsanitary conditions, which could lead to harm to persons.

**Provision: 2.4.7.4.(2)**

---

**Objective**

OS3

**Attributions**

2.4.7.4.(2)(a) [F81-OS3.1]

**Intent(s)**

*Intent 1.* To limit the probability that an inappropriate location for cleanouts will lead to protrusions above floors or depressions in floors, which could lead to tripping, which could lead to harm to persons.

---

## **Intent Statements: NPC 2020**

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### **Objective**

OH2

### **Attributions**

2.4.7.4.(2)(b) [F81-OH2.1]

### **Intent(s)**

*Intent 1.* To limit the probability that the use of untrapped cleanouts as floor drains will lead to, when cleanout covers are removed, the entry of sewer gases into occupied space, which could lead to negative effects on indoor air quality, which could lead to harm to persons.

---

### **Provision: 2.4.7.4.(3)**

---

### **Objective**

OH2

### **Attributions**

[F81-OH2.1]

### **Intent(s)**

*Intent 1.* To limit the probability that a change of direction between cleanouts and traps will lead to inadequate accessibility, which could lead to an inability to clear trap blockages, which could lead to a surcharge, which could lead to unsanitary conditions, which could lead to harm to persons.

---

### **Provision: 2.4.7.4.(4)**

---

### **Objective**

OH2

### **Attributions**

[F81-OH2.1] Applies to drainage piping.

### **Intent(s)**

*Intent 1.* To limit the probability that an excessive change of direction will lead to inadequate accessibility for cleaning equipment, which could lead to an inability to clear blockages in drainage piping, which could lead to drainage system blockages, which could lead to a backup, which could lead to a waste water surcharge, which could lead to unsanitary conditions, which could lead to harm to persons.

---

### **Objective**

OH1

### **Attributions**

[F81-OH1.1] Applies to vent piping.

### **Intent(s)**

*Intent 1.* To limit the probability that an excessive change of direction will lead to inadequate accessibility for cleaning equipment, which could lead to an inability to clear blockages in vent piping, which could lead to inadequate venting, which could lead to the entry of sewer gases into occupied space, which could lead to negative effects on indoor air quality, which could lead to harm to persons.

**Provision: 2.4.7.4.(5)**

---

**Objective**

OH5

**Attributions**

[F43-OH5]

**Intent(s)**

*Intent 1.* To limit the probability that persons coming into contact with cleanouts in occupancies where contamination by hazardous waste is likely will be exposed to that hazardous waste, which could lead to the spread of disease, which could lead to harm to persons.

---

**Objective**

OS3

**Attributions**

[F43-OS3.4]

**Intent(s)**

*Intent 1.* To limit the probability that persons coming into contact with cleanouts in occupancies where contamination by hazardous waste is likely will be exposed to that hazardous waste, which could lead to harm to persons.

**Provision: 2.4.8.1.(1)**

---

**Objective**

OH2

**Attributions**

[F81-OH2.1]

**Intent(s)**

*Intent 1.* To limit the probability that an inadequate slope will lead to insufficient flow velocity to move solids in the system, which could lead to blockages in waste pipes, which could lead to a sanitary drainage system backup, which could lead to unsanitary conditions, which could lead to harm to persons.

**Provision: 2.4.8.2.(1)**

---

**Objective**

OH1

**Attributions**

[F81-OH1.1]

**Intent(s)**

*Intent 1.* To limit the probability that an excessive developed length of untrapped drainage pipe containing drainage effluent will lead to the entry of noxious odours into occupied space, which could lead to negative effects on indoor air quality, which could lead to harm to persons.

---

## **Intent Statements: NPC 2020**

### **Provision: 2.4.9.1.(1)**

---

#### **Objective**

OH2

#### **Attributions**

[F81-OH2.1]

#### **Intent(s)**

*Intent 1.* To limit the probability that inadequate size will lead to flow restrictions, which could lead to the accumulation of sludge and solids, which could lead to drainage system blockages, which could lead to a surcharge, which could lead to unsanitary conditions, which could lead to harm to persons.

---

#### **Objective**

OH1

#### **Attributions**

[F81-OH1.1]

#### **Intent(s)**

*Intent 1.* To limit the probability that inadequate size will lead to inadequate venting of drainage systems, which could lead to the entry of sewer gases into occupied space, which could lead to negative effects on indoor air quality, which could lead to harm to persons.

### **Provision: 2.4.9.2.(1)**

---

#### **Objective**

OH2

#### **Attributions**

[F81-OH2.1]

#### **Intent(s)**

*Intent 1.* To limit the probability that inadequate size will lead to flow restrictions, which could lead to the accumulation of sludge and solids, which could lead to drainage system blockages, which could lead to a surcharge, which could lead to unsanitary conditions, which could lead to harm to persons.

### **Provision: 2.4.9.2.(2)**

---

#### **Objective**

OH2

#### **Attributions**

[F81-OH2.1]

#### **Intent(s)**

*Intent 1.* To limit the probability that inadequate size will lead to inadequate flow capacity for the discharge of three or more water closets flushing simultaneously and draining to a common horizontal waste pipe, which could lead to a surcharge, which could lead to unsanitary conditions, which could lead to harm to persons.

---

**Provision: 2.4.9.2.(3)**

**Objective**

OH2

**Attributions**

[F81-OH2.1]

**Intent(s)**

*Intent 1.* To limit the probability that inadequate size of stacks will lead to inadequate flow capacity for the discharge of seven or more water closets flushing simultaneously and draining, with other fixtures, to a common stack, which could lead to a surcharge, which could lead to unsanitary conditions, which could lead to harm to persons.

---

**Provision: 2.4.9.2.(4)**

**Objective**

OH2

**Attributions**

[F81-OH2.1]

**Intent(s)**

*Intent 1.* To limit the probability that an inadequate size of discharge pipe will lead to an inadequate flow capacity for the discharge of macerating toilets, which could lead to a surcharge, which could lead to flooding, which could lead to unsanitary conditions, which could lead to harm to persons.

---

**Provision: 2.4.9.3.(1)**

**Objective**

OH2

**Attributions**

[F81-OH2.1]

**Intent(s)**

*Intent 1.* To limit the probability that inadequate size of fixture outlet pipes for the flow capacity of specific fixtures will lead to an inadequate flow, which could lead to a surcharge, which could lead to unsanitary conditions, which could lead to harm to persons.

---

**Provision: 2.4.9.3.(2)**

**Objective**

OH2

**Attributions**

[F81-OH2.1]

**Intent(s)**

*Intent 1.* To supersede the requirement of Sentence 2.4.9.3.(1) for minimum fixture outlet pipe size, where fixture outlets serve multiple compartments of the same sink that might be drained simultaneously and for which the hydraulic load is likely to be higher, but not likely to be as high as would be imposed by separate sinks.

---

## **Intent Statements: NPC 2020**

This is to limit the probability that inadequate size will lead to an inability to drain multiple sink compartments simultaneously, which could lead to a backup, which could lead to unsanitary conditions, which could lead to harm to persons.

---

### **Provision: 2.4.9.3.(3)**

#### **Objective**

OP5

#### **Attributions**

[F81-OP5]

#### **Intent(s)**

*Intent 1.* To limit the probability that a standpipe of inadequate length will lead to inadequate flow, which could lead to a surcharge, which could lead to flooding, which could lead to damage to the building or facility.

---

#### **Objective**

OH1

#### **Attributions**

[F81-OH1.1]

#### **Intent(s)**

*Intent 1.* To limit the probability that a standpipe of inadequate length will lead to trap seal failure, which could lead to the entry of sewer gases, which could lead to negative effects on indoor air quality, which could lead to harm to persons.

---

### **Provision: 2.4.9.4.(1)**

#### **Objective**

OH2

#### **Attributions**

[F81-OH2.1]

#### **Intent(s)**

*Intent 1.* To limit the probability that inadequate size will lead to flow restrictions, which could lead to a drainage system backup, which could lead to unsanitary conditions, which could lead to harm to persons.

---

### **Provision: 2.4.9.5.(1)**

#### **Objective**

OH2

#### **Attributions**

[F81-OH2.1, OH2.3]

#### **Intent(s)**

*Intent 1.* To limit the probability that hydraulic load drained to inappropriately sized leaders will lead to a backup or overflow, which could lead to unsanitary conditions, which could lead to harm to persons.

---

**Provision: 2.4.9.5.(2)**

**Objective**

OH2

**Attributions**

[F81-OH2.1]

**Intent(s)**

*Intent 1.* To limit the probability that hydraulic load drained to inappropriately sized leaders will lead to a backup or overflow, which could lead to unsanitary conditions, which could lead to harm to persons.

---

**Provision: 2.4.10.1.(1)**

**Objective**

OH2

**Attributions**

[F81-OH2.1]

**Intent(s)**

*Intent 1.* To limit the probability that the failure to include all significant sources of loads in calculating hydraulic load on drainage pipes will lead to inadequate hydraulic load assumptions, which could lead to the installation of inadequately sized pipe, which could lead to flow restrictions, which could lead to a drainage system backup, which could lead to unsanitary conditions, which could lead to harm to persons.

---

**Provision: 2.4.10.2.(1)**

**Intent(s)**

*Intent 1.* To direct Code users to Table 2.4.9.3., which contains requirements for minimum hydraulic load to be assumed for fixtures.

---

**Provision: 2.4.10.2.(2)**

**Objective**

OH2

**Attributions**

[F81-OH2.1]

**Intent(s)**

*Intent 1.* To limit the probability that inadequate hydraulic load assumptions for items not mentioned in Sentence 2.4.10.2.(1) will lead to inadequately sized fixture outlet pipes, which could lead to a surcharge, which could lead to unsanitary conditions, which could lead to harm to persons.

---

**Provision: 2.4.10.3.(1)**

**Objective**

OH2

**Attributions**

[F81-OH2.1]

---

## **Intent Statements: NPC 2020**

### **Intent(s)**

*Intent 1.* To limit the probability that inadequate hydraulic load assumptions will lead to inadequately sized fixture outlet pipes, which could lead to a surcharge, which could lead to unsanitary conditions, which could lead to harm to persons.

---

### **Provision: 2.4.10.3.(2)**

#### **Objective**

OH2

#### **Attributions**

[F81-OH2.1]

### **Intent(s)**

*Intent 1.* To limit the probability that inadequate hydraulic load assumptions will lead to inadequately sized fixture or equipment outlet pipes, which could lead to a surcharge, which could lead to unsanitary conditions, which could lead to harm to persons.

---

### **Provision: 2.4.10.4.(1)**

#### **Objective**

OP5

#### **Attributions**

[F81-OP5]

### **Intent(s)**

*Intent 1.* To limit the probability that the inappropriate calculation of the hydraulic load will lead to inadequately sized drainage systems, which could lead to an inability to drain roofs or paved surfaces adequately, which could lead to flooding, which could lead to damage to the building or facility.

---

#### **Objective**

OS2

#### **Attributions**

[F20, F81-OS2.1]

### **Intent(s)**

*Intent 1.* To limit the probability that the inappropriate calculation of the hydraulic load will lead to inadequately sized drainage systems, which could lead to an inability to drain roofs or paved surfaces adequately, which could lead to excessive structural loads, which could lead to structural failure, which could lead to harm to persons.

---

### **Provision: 2.4.10.4.(2)**

#### **Objective**

OP5

#### **Attributions**

[F20, F81-OP5]

### **Intent(s)**

---

## **Intent Statements: NPC 2020**

*Intent 1.* To limit the probability that the inappropriate calculation of the hydraulic load will lead to inadequately sized drainage systems, which could lead to an inability to drain roofs or paved surfaces adequately, which could lead to flooding, which could lead to damage to the building or facility.

*Intent 2.* To limit the probability that an inadequate design for roofs or drainage systems will lead to water pooling, which could lead to leakage, which could lead to damage to the building or facility.

---

### **Objective**

OH2

### **Attributions**

2.4.10.4.(2)(a), 2.4.10.4.(2)(d), 2.4.10.4.(2)(e) [F41, F81-OH2.4]

### **Intent(s)**

*Intent 1.* To limit the probability that inadequate drainage will lead to stagnant water remaining on roof tops, which could lead to the growth of mould or mildew, which could lead to harm to persons.

---

### **Objective**

OS2

### **Attributions**

2.4.10.4.(2)(b), 2.4.10.4.(2)(c) [F20, F81-OS2.1]

### **Intent(s)**

*Intent 1.* To limit the probability that an inadequate load carrying capacity for a roof or excessive depth of water on the roof will lead to an inability of roofs to support gravity loads imposed by standing water, which could lead to structural collapse, which could lead to harm to persons.

---

### **Intent(s)**

*Intent 1.* To supersede the requirement of Sentence 2.4.10.4.(1) for hydraulic load assumptions where flow control roof drains are installed, on the basis that water will be held on roof surfaces for a controlled period of time.

---

## **Provision: 2.4.10.4.(3)**

---

### **Objective**

OP5

### **Attributions**

[F20, F81-OP5]

### **Intent(s)**

*Intent 1.* To limit the probability that the inappropriate calculation of the hydraulic load will lead to inadequately sized drainage systems, which could lead to an inability to drain roofs or paved surfaces adequately, which could lead to flooding, which could lead to damage to the building or facility.

*Intent 2.* To limit the probability that inappropriate hydraulic load assumptions will lead to an inadequate design for roofs or drainage systems, which could lead to an inability to drain roofs effectively and in time, which could lead to water pooling, which could lead to the leakage of water, which could lead to damage to the building or facility.

---

## **Intent Statements: NPC 2020**

---

### **Objective**

OS2

### **Attributions**

[F20, F81-OS2.1]

### **Intent(s)**

*Intent 1.* To limit the probability that inappropriate hydraulic load assumptions will lead to an inadequate design for roofs or drainage systems, which could lead to an inability of roofs to support gravity loads imposed by standing water, which could lead to structural collapse, which could lead to harm to persons.

---

## **Provision: 2.4.10.4.(4)**

---

### **Objective**

OP5

### **Attributions**

[F21, F81-OP5]

### **Intent(s)**

*Intent 1.* To limit the probability that roofs will not be provided with adequate emergency overflow measures, which could lead to unintended retention of water or pooling, which could lead to water infiltration, which could lead to damage to the building or facility.

---

### **Objective**

OS2

### **Attributions**

[F20, F81-OS2.1]

### **Intent(s)**

*Intent 1.* To limit the probability that roofs will not be provided with adequate emergency overflow measures, which could lead to overloading of the roof structure, which could lead to structural collapse, which could lead to harm to persons.

---

## **Provision: 2.4.10.5.(1)**

---

### **Objective**

OH2

### **Attributions**

[F81-OH2.1]

### **Intent(s)**

*Intent 1.* To limit the probability that the inappropriate conversion of fixture units to hydraulic load in litres will lead to inadequate hydraulic load assumptions, which could lead to the installation of an inadequately sized drain pipe, which could lead to flow restrictions, which could lead to a drainage system backup, which could lead to unsanitary conditions, which could lead to harm to persons.

**Provision: 2.4.10.6.(1)**

---

**Objective**

OH2

**Attributions**

[F72-OH2.1, OH2.3]

**Intent(s)**

*Intent 1.* To limit the probability that hydraulic load drained to inappropriately sized stacks will lead to a drainage system backup, which could lead to unsanitary conditions, which could lead to harm to persons.

**Provision: 2.4.10.6.(2)**

---

**Objective**

OH2

**Attributions**

[F72-OH2.1, OH2.3]

**Intent(s)**

*Intent 1.* To modify the requirement of Sentence 2.4.10.6.(1), which would otherwise permit a higher load, where nominally horizontal offsets in stacks are 1.5 m or more in length and resistance to flow is higher. This is to limit the probability that hydraulic load drained to inappropriately sized stacks will lead to a drainage system backup, which could lead to unsanitary conditions, which could lead to harm to persons.

**Provision: 2.4.10.7.(1)**

---

**Objective**

OH2

**Attributions**

[F72-OH2.1, OH2.3]

**Intent(s)**

*Intent 1.* To limit the probability that hydraulic load drained to inappropriately sized branches will lead to a backup, which could lead to unsanitary conditions, which could lead to harm to persons.

**Provision: 2.4.10.8.(1)**

---

**Objective**

OH2

**Attributions**

[F81-OH2.1, OH2.3]

**Intent(s)**

*Intent 1.* To limit the probability that hydraulic load drained to inappropriately sized sanitary building drains or sanitary building sewers will lead to a backup, which could lead to unsanitary conditions, which could lead to harm to persons.

---

## **Intent Statements: NPC 2020**

---

### **Provision: 2.4.10.9.(1)**

#### **Objective**

OH2

#### **Attributions**

[F81-OH2.1, OH2.3]

#### **Intent(s)**

*Intent 1.* To limit the probability that hydraulic load drained to inappropriately sized storm building drains, storm building sewers or combined building sewers will lead to a backup or overflow, which could lead to unsanitary conditions, which could lead to harm to persons.

---

### **Provision: 2.4.10.10.(1)**

#### **Objective**

OP5

#### **Attributions**

[F81-OP5]

#### **Intent(s)**

*Intent 1.* To limit the probability that hydraulic load drained to inappropriately sized roof gutters will lead to an overflow or a backup, which could lead to damage to the building or facility.

---

### **Provision: 2.4.10.11.(1)**

#### **Objective**

OP5

#### **Attributions**

[F81-OP5]

#### **Intent(s)**

*Intent 1.* To limit the probability that hydraulic load drained to inappropriately sized leaders will lead to an overflow or a backup, which could lead to damage to the building or facility.

---

### **Provision: 2.4.10.12.(1)**

#### **Objective**

OP5

#### **Attributions**

[F81-OP5]

#### **Intent(s)**

*Intent 1.* To limit the probability that hydraulic load drained to inappropriately sized traps will lead to a backup or overflow, which could lead to damage to the building or facility.

**Provision: 2.4.10.13.(1)**

---

**Objective**

OH2

**Attributions**

[F81-OH2.1]

**Intent(s)**

*Intent 1.* To limit the probability that hydraulic load drained to inappropriately sized storm sewers will lead to a backup or overflow, which could lead to unsanitary conditions, which could lead to harm to persons.

**Provision: 2.5.1.1.(1)**

---

**Objective**

OH1

**Attributions**

[F81-OH1.1]

**Intent(s)**

*Intent 1.* To limit the probability that inadequate venting will lead to siphonic action or back pressures in drainage systems, which could lead to trap seal failure, which could lead to the entry of sewer gases into occupied space, which could lead to negative effects on indoor air quality, which could lead to harm to persons.

**Provision: 2.5.1.1.(2)**

---

**Objective**

OH1

**Attributions**

[F81-OH1.1]

**Intent(s)**

*Intent 1.* To limit the probability that inadequate venting will lead to siphonic action or back pressures in drainage systems, which could lead to trap seal failure, which could lead to the entry of sewer gases into occupied space, which could lead to negative effects on indoor air quality, which could lead to harm to persons.

**Provision: 2.5.1.1.(3)**

---

**Intent(s)**

*Intent 1.* To exempt floor drain traps meeting the stated conditions from venting requirements.

**Provision: 2.5.1.1.(4)**

---

**Intent(s)**

*Intent 1.* To exempt traps meeting the stated conditions from venting requirements because, if these traps siphon, the trap seal will be replenished naturally.

---

## **Intent Statements: NPC 2020**

### **Provision: 2.5.2.1.(1)**

---

#### **Objective**

OH1

#### **Attributions**

[F81-OH1.1]

#### **Intent(s)**

*Intent 1.* To limit the probability that a sanitary drainage pipe will not have adequate capacity to serve as a wet vent, which could lead to an inability to accommodate expected hydraulic loads, which could lead to excessive pressure on wet-vented fixtures, which could lead to trap seal failure, which could lead to the entry of sewer gases into occupied space, which could lead to negative effects on indoor air quality, which could lead to harm to persons.

### **Provision: 2.5.3.1.(1)**

---

#### **Objective**

OH1

#### **Attributions**

[F40, F81-OH1.1]

#### **Intent(s)**

*Intent 1.* To limit the probability of improper or inadequate circuit venting of horizontal branches, which could lead to an inability to accommodate expected hydraulic loads, which could lead to excessive pressure on circuit-vented fixtures, which could lead to trap seal failure, which could lead to the entry of sewer gases into occupied space, which could lead to negative effects on indoor air quality, which could lead to harm to persons.

### **Provision: 2.5.3.1.(2)**

---

#### **Objective**

OH1

#### **Attributions**

[F40, F81-OH1.1]

#### **Intent(s)**

*Intent 1.* To limit the probability that fixtures will be improperly or inadequately vented, which could lead to the entry of sewer gases into occupied space, which could lead to negative effects on indoor air quality, which could lead to harm to persons.

### **Provision: 2.5.3.1.(3)**

---

#### **Objective**

OH1

#### **Attributions**

[F40, F81-OH1.1]

#### **Intent(s)**

---

## **Intent Statements: NPC 2020**

*Intent 1.* To limit the probability that a relief vent will be inadequately connected to the branch that forms part of a circuit-vented system, which could lead to the entry of sewer gases into occupied space, which could lead to negative effects on indoor air quality, which could lead to harm to persons.

---

### **Provision: 2.5.3.1.(4)**

#### **Objective**

OH1

#### **Attributions**

[F40, F81-OH1.1]

#### **Intent(s)**

*Intent 1.* To limit the probability that a sanitary drainage pipe will act as a relief vent under improper conditions, which could lead to the entry of sewer gases into occupied space, which could lead to negative effects on indoor air quality, which could lead to harm to persons.

---

### **Provision: 2.5.3.1.(5)**

#### **Objective**

OH1

#### **Attributions**

[F40, F81-OH1.1]

#### **Intent(s)**

*Intent 1.* To limit the probability that a relief vent will serve as a combined relief vent under improper conditions, which could lead to the entry of sewer gases into occupied space, which could lead to negative effects on indoor air quality, which could lead to harm to persons.

---

### **Provision: 2.5.3.1.(6)**

#### **Objective**

OH1

#### **Attributions**

[F40, F81-OH1.1]

#### **Intent(s)**

*Intent 1.* To limit the probability that additional circuit vents will not be provided where needed, which could lead to the entry of sewer gases into occupied space, which could lead to negative effects on indoor air quality, which could lead to harm to persons.

---

### **Provision: 2.5.3.1.(7)**

#### **Objective**

OH1

#### **Attributions**

[F40, F81-OH1.1]

#### **Intent(s)**

---

## **Intent Statements: NPC 2020**

*Intent 1.* To limit the probability that a sanitary drainage pipe will serve as an additional circuit vent under improper conditions, which could lead to the entry of sewer gases into occupied space, which could lead to negative effects on indoor air quality, which could lead to harm to persons.

---

### **Provision: 2.5.3.1.(8)**

#### **Objective**

OH1

#### **Attributions**

[F40, F81-OH1.1]

#### **Intent(s)**

*Intent 1.* To limit the probability that elements will be inadequately connected to circuit vents and additional circuit vents, which could lead to the entry of sewer gases into occupied space, which could lead to negative effects on indoor air quality, which could lead to harm to persons.

---

### **Provision: 2.5.3.1.(9)**

#### **Objective**

OH1

#### **Attributions**

[F40, F81-OH1.1]

#### **Intent(s)**

*Intent 1.* To limit the probability that a circuit-vented branch will be inadequately sized, which could lead to the entry of sewer gases into occupied space, which could lead to negative effects on indoor air quality, which could lead to harm to persons.

---

### **Provision: 2.5.3.1.(10)**

#### **Objective**

OH1

#### **Attributions**

[F40, F81-OH1.1]

#### **Intent(s)**

*Intent 1.* To limit the probability that additional circuit vents will be inadequately sized, which could lead to the entry of sewer gases into occupied space, which could lead to negative effects on indoor air quality, which could lead to harm to persons.

---

### **Provision: 2.5.3.1.(11)**

#### **Objective**

OH1

#### **Attributions**

[F40, F81-OH1.1]

#### **Intent(s)**

---

## **Intent Statements: NPC 2020**

*Intent 1.* To limit the probability that the hydraulic load on a circuit vent will be improperly calculated, which could lead to the entry of sewer gases into occupied space, which could lead to negative effects on indoor air quality, which could lead to harm to persons.

---

### **Provision: 2.5.4.1.(1)**

#### **Objective**

OH1

#### **Attributions**

[F40, F81-OH1.1]

#### **Intent(s)**

*Intent 1.* To limit the probability that the lack of a venting connection will lead to siphonic action or back pressures in drainage systems, which could lead to trap seal failure, which could lead to the entry of sewer gases into occupied space, which could lead to negative effects on indoor air quality, which could lead to harm to persons.

---

### **Provision: 2.5.4.2.(1)**

#### **Objective**

OH1

#### **Attributions**

[F40, F81-OH1.1]

#### **Intent(s)**

*Intent 1.* To limit the probability that inadequate venting of stacks will lead to siphonic action or back pressure in drainage systems, which could lead to trap seal failure, which could lead to the entry of sewer gases into occupied space, which could lead to negative effects on indoor air quality, which could lead to harm to persons.

---

### **Provision: 2.5.4.2.(2)**

#### **Intent(s)**

*Intent 1.* To exempt stacks that serve as wet vents from the requirement to have a vent stack as stated in Sentence 2.5.4.2.(1)

---

### **Provision: 2.5.4.2.(3)**

#### **Objective**

OH1

#### **Attributions**

[F40, F81-OH1.1]

#### **Intent(s)**

*Intent 1.* To limit the probability that inadequate protection for connections against back pressure caused by surge flow in the stack will lead to siphonic action or back pressures in drainage systems, which could lead to trap seal failure, which could lead to the entry of sewer gases into occupied space, which could lead to negative effects on indoor air quality, which could lead to harm to persons.

---

## **Intent Statements: NPC 2020**

### **Provision: 2.5.4.2.(4)**

---

#### **Objective**

OH1

#### **Attributions**

[F40, F81-OH1.1]

#### **Intent(s)**

*Intent 1.* To limit the probability that:

- hydraulic load from fixtures discharging simultaneously will lead to siphonic action or back pressures,
- discharge from water closets will lead to the siphonage of downstream traps,
- hydraulic load from fixtures located on higher storeys will lead to trap seal failure due to compression of air below the connection, or
- the failure of wet vent sections to conform to wet vent requirements will lead to siphonic action or back pressures.

This is to limit the probability of trap seal failure in a vent stack that functions as a wet vent, which could lead to the entry of sewer gases into occupied space, which could lead to negative effects on indoor air quality, which could lead to harm to persons.

### **Provision: 2.5.4.3.(1)**

---

#### **Objective**

OH1

#### **Attributions**

[F40, F81-OH1.1]

#### **Intent(s)**

*Intent 1.* To limit the probability that inadequate venting will lead to a piston effect of flow that typically fills a high proportion of a pipe's cross-sectional area, which could lead to back pressure in drainage systems, which could lead to trap seal failure, which could lead to the entry of sewer gases into occupied space, which could lead to negative effects on indoor air quality, which could lead to harm to persons.

### **Provision: 2.5.4.3.(2)**

---

#### **Objective**

OH1

#### **Attributions**

[F40, F81-OH1.1]

#### **Intent(s)**

*Intent 1.* To limit the probability that the connection of yoke vents by means of an inappropriate fitting or at an inappropriate location will lead to the accumulation of sewage in yoke vents, which could lead to a reduced vent capacity, which could lead to siphonic action or back pressure in drainage systems, which could lead to trap seal failure, which could lead to the entry of sewer gases into occupied space, which could lead to negative effects on indoor air quality, which could lead to harm to persons.

**Provision: 2.5.4.3.(3)**

---

**Objective**

OH1

**Attributions**

[F40, F81-OH1.1]

**Intent(s)**

*Intent 1.* To limit the probability that blockages in sanitary drainage pipes that are served by yoke vents will lead to the backflow of sewage into vent stacks via yoke vents, which could lead to blockage of the vent, which could lead to a reduced vent capacity, which could lead to siphonic action or back pressure in drainage systems, which could lead to trap seal failure, which could lead to the entry of sewer gases into occupied space, which could lead to negative effects on indoor air quality, which could lead to harm to persons.

**Provision: 2.5.4.3.(4)**

---

**Objective**

OH1

**Attributions**

[F40, F81-OH1.1]

**Intent(s)**

*Intent 1.* To exempt certain stack installations from the requirement for a yoke vent where alternative venting is provided.

This is to limit the probability that inadequate venting will lead to back pressure in drainage systems, which could lead to trap seal failure, which could lead to the entry of sewer gases into occupied space, which could lead to negative effects on indoor air quality, which could lead to harm to persons [see Sentence 2.5.4.3.(1)].

**Provision: 2.5.4.4.(1)**

---

**Objective**

OH1

**Attributions**

[F40, F81-OH1.1]

**Intent(s)**

*Intent 1.* To limit the probability that inadequate relief venting at offsets in stacks that are subject to a high hydraulic load will lead to a piston effect of flow that typically fills a high proportion of a pipe's cross-sectional area due to changes in direction, which could lead to back pressure in drainage systems, which could lead to trap seal failure, which could lead to the entry of sewer gases into occupied space, which could lead to negative effects on indoor air quality, which could lead to harm to persons.

---

## **Intent Statements: NPC 2020**

### **Provision: 2.5.4.5.(1)**

---

#### **Objective**

OH1

#### **Attributions**

[F40, F81-OH1.1]

#### **Intent(s)**

*Intent 1.* To limit the probability that a vent will not have adequate capacity to serve as a wet vent, which could lead to an inability to accommodate expected hydraulic loads, which could lead to siphonic action or back pressure on wet-vented fixtures, which could lead to trap seal failure, which could lead to the entry of sewer gases into occupied space, which could lead to negative effects on indoor air quality, which could lead to harm to persons.

### **Provision: 2.5.5.1.(1)**

---

#### **Objective**

OH1

#### **Attributions**

[F40, F81-OH1.1]

#### **Intent(s)**

*Intent 1.* To limit the probability that a lack of vent pipes or the installation of vent pipes in a location where they are susceptible to blockage by the contents in the sump or tank will lead to an accumulation of gases, which could lead to a buildup of pressure in the sump or tank, which could lead to a restricted flow to the sump or tank, which could lead to backups, which could lead to the entry of sewage into occupied space, which could lead to unsanitary conditions, which could lead to harm to persons.

### **Provision: 2.5.5.2.(1)**

---

#### **Objective**

OS1

#### **Attributions**

[F40, F81-OS1.1]

#### **Intent(s)**

*Intent 1.* To limit the probability that inadequate venting will lead to an accumulation of flammable or explosive gases, which could lead to an explosion or fire, which could lead to harm to persons.

---

#### **Objective**

OH2

#### **Attributions**

[F72, F81-OH2.1, OH2.3]

#### **Intent(s)**

*Intent 1.* To limit the probability that inadequate venting will lead to a buildup of excessive gas pressure in interceptors, which could lead to an inability of sewage to flow into interceptors, which could lead to backups, which could lead to the entry of sewage into occupied space, which could lead to unsanitary conditions, which could lead to harm to persons.

---

**Objective**

OH1

**Attributions**

[F40, F81-OH1.1]

**Intent(s)**

*Intent 1.* To limit the probability that inadequate venting will lead to a buildup of excessive gas pressure in interceptors, which could lead to the seepage of toxic or noxious gases into buildings, which could lead to negative effects on indoor air quality, which could lead to harm to persons.

---

**Provision: 2.5.5.2.(2)**

---

**Objective**

OS1

**Attributions**

[F40, F81-OS1.1]

**Intent(s)**

*Intent 1.* To limit the probability that pressure differentials within oil interceptors will lead to an accumulation of flammable or explosive gases, which could lead to an explosion or fire, which could lead to harm to persons.

---

**Objective**

OH1

**Attributions**

[F40, F81-OH1.1]

**Intent(s)**

*Intent 1.* To limit the probability that pressure differentials within oil interceptors will lead to a buildup of excessive gas pressure in interceptors, which could lead to the seepage of toxic or noxious gases into buildings, which could lead to negative effects on indoor air quality, which could lead to harm to persons.

---

**Provision: 2.5.5.2.(3)**

---

**Objective**

OS1

**Attributions**

[F40, F81-OS1.1]

**Intent(s)**

*Intent 1.* To limit the probability that a lack of vent pipes or the installation of vent pipes in a location where they are susceptible to blockage will lead to a restricted flow to the sump, which could lead to backups, which could lead to the entry of waste into occupied space, which could lead to unsanitary conditions, which could lead to harm to persons.

---

## **Intent Statements: NPC 2020**

### **Provision: 2.5.5.2.(4)**

---

#### **Objective**

OS1

#### **Attributions**

[F40, F81-OS1.1]

#### **Intent(s)**

*Intent 1.* To limit the probability that inadequate venting will lead to an accumulation of flammable or explosive gases, which could lead to an explosion or fire, which could lead to harm to persons.

### **Provision: 2.5.5.2.(5)**

---

#### **Objective**

OS1

#### **Attributions**

[F40, F81-OS1.1]

#### **Intent(s)**

*Intent 1.* To limit the probability that inadequate venting will lead to an accumulation of flammable or explosive gases, which could lead to an explosion or fire, which could lead to harm to persons.

### **Provision: 2.5.5.3.(1)**

---

#### **Objective**

OS3

#### **Attributions**

[F80, F81-OS3.4]

#### **Intent(s)**

*Intent 1.* To limit the probability that corrosive gases will be vented into sanitary venting systems, which could lead to the accelerated deterioration of vent piping, which could lead to the entry of corrosive gases into occupied space, which could lead to negative effects on indoor air quality, which could lead to harm to persons.

### **Provision: 2.5.5.4.(1)**

---

#### **Objective**

OH1

#### **Attributions**

[F81-OH1.1]

#### **Intent(s)**

*Intent 1.* To limit the probability that an inadequate make-up air provision in drainage systems will lead to back pressure in drainage systems, which could lead to trap seal failure, which could lead to the entry of sewer gases into occupied space, which could lead to negative effects on indoor air quality, which could lead to harm to persons.

**Provision: 2.5.5.5.(1)**

---

**Objective**

OH1

**Attributions**

[F81-OH1.1] Applies to *venting systems*.

**Intent(s)**

*Intent 1.* To limit the probability that the inadequate provision for venting and drainage of future installations of fixtures will lead to performance that is below expectations, which could lead to trap seal failure, which could lead to the entry of sewer gases into occupied space, which could lead to negative effects on indoor air quality, which could lead to harm to persons.

---

**Objective**

OH2

**Attributions**

[F81-OH2.1, OH2.3] Applies to *drainage systems*.

**Intent(s)**

*Intent 1.* To limit the probability that the inadequate provision for venting and drainage of future installations of fixtures will lead to performance that is below expectations, which could lead to backups, which could lead to the entry of sewage or contaminated water into occupied space, which could lead to unsanitary conditions, which could lead to harm to persons.

**Provision: 2.5.5.5.(2)**

---

**Objective**

OH1

**Attributions**

[F40, F81-OH1.1]

**Intent(s)**

*Intent 1.* To limit the probability that the inadequate provision for venting of future installations of fixtures will lead to performance that is below expectations, which could lead to trap seal failure, which could lead to the entry of sewer gases into occupied space, which could lead to negative effects on indoor air quality, which could lead to harm to persons.

**Provision: 2.5.6.1.(1)**

---

**Objective**

OH1

**Attributions**

[F81-OH1.1]

**Intent(s)**

*Intent 1.* To limit the probability that depressions in vent pipes will lead to an accumulation of liquids from condensation or backflow, which could lead to obstruction of the vent capacity, which could lead to inadequate venting, which could lead to siphonic action or back pressures in drainage systems, which could lead to trap seal failure, which could lead to the entry of sewer gases into occupied space, which could lead to negative effects on indoor air quality, which could lead to harm to persons.

---

## **Intent Statements: NPC 2020**

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### **Objective**

OS1

### **Attributions**

[F81-OS1.1]

### **Intent(s)**

*Intent 1.* To limit the probability that depressions in vent pipes will lead to an accumulation of liquids from condensation or backflow, which could lead to obstruction of the oil interceptor's vent capacity, which could lead to an accumulation of flammable or explosive gases in buildings, which could lead to an explosion or fire, which could lead to harm to persons.

---

### **Provision: 2.5.6.2.(1)**

---

### **Objective**

OH1

### **Attributions**

[F81-OH1.1]

### **Intent(s)**

*Intent 1.* To limit the probability that long vent pipes will be installed horizontally, which could lead to the restriction of airflow, which could lead to excessive pressure in the venting system, which could lead to trap seal failure, which could lead to the entry of sewer gases into occupied space, which could lead to negative effects on indoor air quality, which could lead to harm to persons.

---

### **Provision: 2.5.6.2.(2)**

---

### **Objective**

OH1

### **Attributions**

[F81-OH1.1]

### **Intent(s)**

*Intent 1.* To limit the probability that soil or waste will obstruct a vent pipe, which could lead to inadequate venting, which could lead to siphonic action or back pressures in drainage systems, which could lead to trap seal failure, which could lead to the entry of sewer gases into occupied space, which could lead to negative effects on indoor air quality, which could lead to harm to persons.

---

### **Provision: 2.5.6.2.(3)**

---

### **Objective**

OH1

### **Attributions**

[F40, F81-OH1.1]

### **Intent(s)**

*Intent 1.* To limit the probability that improperly capped vents will lead to the entry of sewer gases into occupied space, which could lead to negative effects on indoor air quality, which could lead to harm to persons.

**Provision: 2.5.6.3.(1)**

---

**Objective**

OH1

**Attributions**

[F81-OH1.1]

**Intent(s)**

*Intent 1.* To limit the probability that an inappropriate location for the fixture traps will lead to:

- an inadequate trap arm length, which could lead to blockage of vents by solids leaving traps,
- an excessive trap arm fall, which could lead to excessive siphonic action on traps,
- an excessive trap arm direction change, which could lead to flow obstructions between traps and vent connections, and
- the evaporation of trap seals due to air movement in DWV systems.

This is to limit the probability of vent or trap seal failure, which could lead to the entry of sewer gases into occupied space, which could lead to negative effects on indoor air quality, which could lead to harm to persons.

**Provision: 2.5.6.3.(2)**

---

**Objective**

OH2

**Attributions**

[F81-OH2.1, OH2.3]

**Intent(s)**

*Intent 1.* To limit the probability that an excessive cumulative change of direction will lead to flow restrictions between siphonic action fixtures and sanitary drainage piping to which they connect, which could lead to waste water backup and surcharge, which could lead to the entry of sewage into occupied space, which could lead to unsanitary conditions, which could lead to harm to persons.

**Provision: 2.5.6.3.(3)**

---

**Objective**

OH1

**Attributions**

[F81-OH1.1]

**Intent(s)**

*Intent 1.* To limit the probability that excessive distance between connections of fixture drains to fixtures and vent pipes will lead to excessive siphonic action at fixture drains such that it would prevent re-establishing trap seals after flushing, which could lead to the entry of sewer gases into occupied space, which could lead to negative effects on indoor air quality, which could lead to harm to persons.

---

## **Intent Statements: NPC 2020**

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### **Provision: 2.5.6.3.(4)**

#### **Objective**

OH1

#### **Attributions**

[F40, F81-OH1.1]

#### **Intent(s)**

*Intent 1.* To limit the probability that excessive distance between the connections of fixture drains to fixtures and vent pipes will lead to excessive siphonic action at fixture drains such that it would prevent re-establishing trap seals after use, which could lead to the entry of sewer gases into occupied space, which could lead to negative effects on indoor air quality, which could lead to harm to persons.

---

### **Provision: 2.5.6.4.(1)**

#### **Objective**

OH1

#### **Attributions**

[F81-OH1.1]

#### **Intent(s)**

*Intent 1.* To limit the probability that an inadequate vertical height above the flood level rim of fixtures will lead to backflow into vent pipes in the event of blockages in drainage systems, which could lead to an obstruction of vent piping by soil or waste, which could lead to inadequate venting, which could lead to trap seal failure, which could lead to the entry of sewer gases into occupied space, which could lead to negative effects on indoor air quality, which could lead to harm to persons.

---

### **Provision: 2.5.6.4.(2)**

#### **Objective**

OH1

#### **Attributions**

[F81-OH1.1]

#### **Intent(s)**

*Intent 1.* To limit the probability that an inappropriate connection will lead to backflow into vent pipes in the event of blockages in drainage systems, which could lead to an obstruction of vent piping by soil or waste, which could lead to inadequate vent capacity, which could lead to trap seal failure, which could lead to the entry of sewer gases into occupied space, which could lead to negative effects on indoor air quality, which could lead to harm to persons.

---

### **Provision: 2.5.6.5.(1)**

#### **Objective**

OH1

#### **Attributions**

[F81-OH1.1]

#### **Intent(s)**

---

## **Intent Statements: NPC 2020**

*Intent 1.* To limit the probability that vent pipes will terminate in buildings, which could lead to the entry of sewer gases into occupied space, which could lead to negative effects on indoor air quality, which could lead to harm to persons.

---

### **Provision: 2.5.6.5.(2)**

#### **Objective**

OH1

#### **Attributions**

[F81-OH1.1]

#### **Intent(s)**

*Intent 1.* To limit the probability that vent pipes are terminated in a way that will allow the entry of sewer gases into occupied space, which could lead to negative effects on indoor air quality, which could lead to harm to persons.

---

### **Provision: 2.5.6.5.(3)**

#### **Objective**

OH1

#### **Attributions**

[F81-OH1.1]

#### **Intent(s)**

*Intent 1.* To limit the probability that vent pipes located outside of buildings will be improperly installed, which could lead to the entry of sewer gases into occupied space, which could lead to negative effects on indoor air quality, which could lead to harm to persons.

---

### **Provision: 2.5.6.5.(4)**

#### **Objective**

OH1

#### **Attributions**

[F81-OH1.1]

#### **Intent(s)**

*Intent 1.* To limit the probability that an inadequate distance between vent pipes that could emit sewer gases and occupancies or openings in building envelopes that could provide access to occupancies will lead to the entry of sewer gases into occupied space, which could lead to negative effects on indoor air quality, which could lead to harm to persons.

---

### **Provision: 2.5.6.5.(5)**

#### **Objective**

OH1

#### **Attributions**

[F81-OH1.1]

#### **Intent(s)**

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## **Intent Statements: NPC 2020**

*Intent 1.* To limit the probability that an inadequate terminal height will lead to blockage from snow or the entry of rainwater or water from melting snow into vents, which could lead to the obstruction of vents, which could lead to inadequate venting, which could lead to siphonic action or back pressures in drainage systems, which could lead to trap seal failure, which could lead to the entry of sewer gases into occupied space, which could lead to negative effects on indoor air quality, which could lead to harm to persons.

---

### **Provision: 2.5.6.5.(6)**

#### **Objective**

OH1

#### **Attributions**

[F81-OH1.1]

#### **Intent(s)**

*Intent 1.* To limit the probability that inadequate frost protection will lead to blockage of vents due to freeze-up of condensation, which could lead to inadequate venting, which could lead to siphonic action or back pressures in drainage systems, which could lead to trap seal failure, which could lead to the entry of sewer gases into occupied space, which could lead to negative effects on indoor air quality, which could lead to harm to persons.

---

### **Provision: 2.5.7.1.(1)**

#### **Objective**

OH1

#### **Attributions**

[F81-OH1.1]

#### **Intent(s)**

*Intent 1.* To limit the probability that an inadequate vent pipe size will lead to an insufficient volume of air in venting systems, which could lead to siphonic action or back pressure in drainage systems, which could lead to trap seal failure, which could lead to the entry of sewer gases into occupied space, which could lead to negative effects on indoor air quality, which could lead to harm to persons.

---

### **Provision: 2.5.7.2.(1)**

#### **Objective**

OH1

#### **Attributions**

[F81-OH1.1]

#### **Intent(s)**

*Intent 1.* To limit the probability that inadequate size of other vent connections will lead to an insufficient volume of air in venting systems, which could lead to siphonic action or back pressure in drainage systems, which could lead to trap seal failure, which could lead to the entry of sewer gases into occupied space, which could lead to negative effects on indoor air quality, which could lead to harm to persons.

**Provision: 2.5.7.2.(2)**

---

**Objective**

OH1

**Attributions**

[F81-OH1.1]

**Intent(s)**

*Intent 1.* To limit the probability that building drains will not be vented due to frozen manhole covers, which could lead to an inadequate venting capacity, which could lead to an insufficient volume of air, which could lead to trap seal failure, which could lead to the entry of sewer gases into occupied space, which could lead to negative effects on indoor air quality, which could lead to harm to persons.

**Provision: 2.5.7.3.(1)**

---

**Objective**

OH1

**Attributions**

[F81-OH1.1]

**Intent(s)**

*Intent 1.* To limit the probability that an inadequate vent capacity will lead to an inadequate volume of air in venting systems, which could lead to excessive pressure in drainage systems, which could lead to trap seal failure, which could lead to the entry of sewer gases into occupied space, which could lead to negative effects on indoor air quality, which could lead to harm to persons.

**Provision: 2.5.7.3.(2)**

---

**Objective**

OH1

**Attributions**

[F81-OH1.1]

**Intent(s)**

*Intent 1.* To limit the probability that an inadequate vent capacity will lead to an insufficient volume of air in venting systems, which could lead to siphonic action or back pressure in drainage systems, which could lead to trap seal failure, which could lead to the entry of sewer gases into occupied space, which could lead to negative effects on indoor air quality, which could lead to harm to persons.

**Provision: 2.5.7.4.(1)**

---

**Objective**

OH1

**Attributions**

[F81-OH1.1]

**Intent(s)**

*Intent 1.* To limit the probability that an inadequate relief vent capacity will lead to an insufficient volume of air in venting systems, which could lead to siphonic action or back pressure in drainage systems,

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## **Intent Statements: NPC 2020**

which could lead to trap seal failure, which could lead to the entry of sewer gases into occupied space, which could lead to negative effects on indoor air quality, which could lead to harm to persons.

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### **Provision: 2.5.7.5.(1)**

#### **Objective**

OH1

#### **Attributions**

[F81-OH1.1]

#### **Intent(s)**

*Intent 1.* To limit the probability that an inadequate yoke vent capacity will lead to an insufficient volume of air in venting systems, which could lead to excessive pressure in drainage systems, which could lead to trap seal failure, which could lead to the entry of sewer gases into occupied space, which could lead to negative effects on indoor air quality, which could lead to harm to persons.

---

### **Provision: 2.5.7.6.(1)**

#### **Objective**

OH2

#### **Attributions**

[F81-OH2.1]

#### **Intent(s)**

*Intent 1.* To limit the probability that an inadequate vent size will lead to restricted air flow from manholes when waste water is flowing toward manholes, which could lead to airlock and flow restriction of waste, which could lead to backups, which could lead to contact with sewage or contaminated water, which could lead to unsanitary conditions, which could lead to harm to persons.

---

### **Provision: 2.5.7.7.(1)**

#### **Objective**

OH2

#### **Attributions**

[F81-OH2.1]

#### **Intent(s)**

*Intent 1.* To limit the probability that an inadequate vent size will lead to restricted air flow from sumps or tanks when waste water is flowing toward sumps or tanks, which could lead to airlock, which could lead to flow restriction of waste or harmful chemicals, which could lead to backups, which could lead to the entry of sewage or contaminated water into occupied space, which could lead to unsanitary or unsafe conditions, which could lead to harm to persons.

---

### **Provision: 2.5.7.7.(2)**

#### **Objective**

OH2

#### **Attributions**

[F81-OH2.1]

**Intent(s)**

*Intent 1.* To limit the probability that an inadequate vent size will lead to a restricted air flow from sumps when waste water is flowing toward sumps, which could lead to airlock, which could lead to flow restriction of waste, which could lead to backups, which could lead to the entry of sewage or contaminated water into occupied space, which could lead to unsanitary conditions, which could lead to harm to persons.

---

**Intent(s)**

*Intent 1.* To exempt from the requirements of Sentence 2.5.7.7.(1) sumps that would require vent pipes larger than NPS 4 since larger vent pipes are not likely to perform significantly better in a pressure equalization role.

**Provision: 2.5.7.7.(3)**

---

**Objective**

OH1

**Attributions**

[F81-OH1.1]

**Intent(s)**

*Intent 1.* To limit the probability that inadequate venting will lead to siphonic action or back pressure in drainage systems, which could lead to trap seal failure, which could lead to the entry of sewer gases into occupied space, which could lead to negative effects on indoor air quality, which could lead to harm to persons.

**Provision: 2.5.8.1.(1)**

---

**Objective**

OH1

**Attributions**

[F81-OH1.1]

**Intent(s)**

*Intent 1.* To limit the probability that an excessive hydraulic load draining into wet vents will lead to an insufficient volume of air in wet venting systems where piping functions as both waste and vent piping, which could lead to trap seal failure, which could lead to the entry of sewer gases into occupied space, which could lead to negative effects on indoor air quality, which could lead to harm to persons.

**Provision: 2.5.8.1.(2)**

---

**Intent(s)**

*Intent 1.* To exempt from the requirements of Sentence 2.5.8.1.(1) the hydraulic load of the most downstream fixtures or symmetrically connected fixtures when determining the size of the wet vent from Table 2.5.8.1., on the basis that the hydraulic load of the wet-vented connected fixtures has no impact on the determination of the vent pipe of the most downstream fixture or on symmetrically connected fixtures.

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## **Intent Statements: NPC 2020**

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### **Provision: 2.5.8.2.(1)**

#### **Objective**

OH1

#### **Attributions**

[F81-OH1.1]

#### **Intent(s)**

*Intent 1.* To limit the probability that an inadequate vent size will lead to inadequate venting capacity, which could lead to insufficient air volume, which could lead to trap seal failure, which could lead to the entry of sewer gases into occupied space, which could lead to negative effects on indoor air quality, which could lead to harm to persons.

---

### **Provision: 2.5.8.2.(2)**

#### **Intent(s)**

*Intent 1.* To specify that the length of individual vents or dual vents is not taken into consideration in the determination of their size.

---

### **Provision: 2.5.8.3.(1)**

#### **Objective**

OH1

#### **Attributions**

[F81-OH1.1]

#### **Intent(s)**

*Intent 1.* To limit the probability that an inadequate vent size will lead to inadequate venting capacity, which could lead to an insufficient volume of air, which could lead to trap seal failure, which could lead to the entry of sewer gases into occupied space, which could lead to negative effects on indoor air quality, which could lead to harm to persons.

---

### **Provision: 2.5.8.3.(2)**

#### **Intent(s)**

*Intent 1.* To define what is meant by “length” in reference to branch vents for the purposes of applying Table 2.5.8.3.

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### **Provision: 2.5.8.3.(3)**

#### **Intent(s)**

*Intent 1.* To define what is meant by “length” in reference to vent headers for the purposes of applying Table 2.5.8.3.

---

### **Provision: 2.5.8.3.(4)**

#### **Intent(s)**

---

## **Intent Statements: NPC 2020**

*Intent 1.* To define what is meant by “length” in reference to circuit vents for the purposes of applying Table 2.5.8.3.

**Provision: 2.5.8.3.(5)**

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### **Intent(s)**

*Intent 1.* To define what is meant by “length” in reference to continuous vents for the purposes of applying Table 2.5.8.3.

**Provision: 2.5.8.4.(1)**

---

### **Intent(s)**

*Intent 1.* To direct Code users to Table 2.5.8.4. for the sizing of vent stacks and stack vents.

**Provision: 2.5.8.4.(2)**

---

### **Intent(s)**

*Intent 1.* To define what is meant by “length” in reference to stack vents and vent stacks for the purposes of applying Table 2.5.8.4.

**Provision: 2.5.8.4.(3)**

---

### **Objective**

OH1

### **Attributions**

[F81-OH1.1]

### **Intent(s)**

*Intent 1.* To limit the probability that an inadequate vent size will lead to an inadequate venting capacity, which could lead to an insufficient volume of air, which could lead to trap seal failure, which could lead to the entry of sewer gases into occupied space, which could lead to negative effects on indoor air quality, which could lead to harm to persons.

**Provision: 2.5.8.4.(4)**

---

### **Objective**

OH1

### **Attributions**

[F81-OH1.1]

### **Intent(s)**

*Intent 1.* To limit the probability that an insufficient extension of stack vents will lead to inadequate venting capacity, which could lead to an insufficient volume of air, which could lead to trap seal failure, which could lead to the entry of sewer gases into occupied space, which could lead to negative effects on indoor air quality, which could lead to harm to persons.

**Provision: 2.5.8.5.(1)**

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## **Intent Statements: NPC 2020**

### **Intent(s)**

*Intent 1.* To specify that the length of the vents listed is not taken into consideration in the determination of their size.

---

### **Provision: 2.5.9.1.(1)**

### **Intent(s)**

*Intent 1.* To supersede the requirement stated in Sentence 2.5.1.1.(1) regarding venting so as to permit the use of air admittance valves.

---

### **Provision: 2.5.9.2.(1)**

### **Objective**

OH1

### **Attributions**

[F40, F81-OH1.1]

### **Intent(s)**

*Intent 1.* To limit the probability that the lack of a venting connection will lead to siphonic action or back pressure in drainage systems, which could lead to trap seal failure, which could lead to the entry of sewer gases into occupied space, which could lead to negative effects on indoor air quality, which could lead to harm to persons.

---

### **Provision: 2.5.9.2.(2)**

### **Objective**

OH1

### **Attributions**

[F40, F81-OH1.1]

### **Intent(s)**

*Intent 1.* To limit the probability that inappropriate venting will lead to siphonic action or back pressure in drainage systems, which could lead to trap seal failure, which could lead to the entry of sewer gases into occupied space, which could lead to negative effects on indoor air quality, which could lead to harm to persons.

---

### **Provision: 2.5.9.3.(1)**

### **Objective**

OH1

### **Attributions**

[F40, F81-OH1.1]

### **Intent(s)**

*Intent 1.* To limit the probability that installation in an inappropriate location will lead to siphonic action or back pressure in drainage systems, which could lead to trap seal failure, which could lead to the entry of sewer gases into occupied space, which could lead to negative effects on indoor air quality, which could lead to harm to persons.

---

**Provision: 2.5.9.3.(2)**

**Objective**

OH1

**Attributions**

[F40, F81-OH1.1]

**Intent(s)**

*Intent 1.* To limit the probability that inappropriate installation will lead to siphonic action or back pressure in drainage systems, which could lead to trap seal failure, which could lead to the entry of sewer gases into occupied space, which could lead to negative effects on indoor air quality, which could lead to harm to persons.

---

**Provision: 2.5.9.3.(3)**

**Objective**

OH1

**Attributions**

[F40, F81-OH1.1]

**Intent(s)**

*Intent 1.* To limit the probability that the installation of air admittance valves with an inappropriate rating will lead to siphonic action or back pressure in drainage systems, which could lead to trap seal failure, which could lead to the entry of sewer gases into occupied space, which could lead to negative effects on indoor air quality, which could lead to harm to persons.

---

**Provision: 2.5.9.3.(4)**

**Objective**

OH1

**Attributions**

[F40, F81-OH1.1]

**Intent(s)**

*Intent 1.* To limit the probability that the airtightness of the enclosure will lead to siphonic action or back pressure in drainage systems, which could lead to trap seal failure, which could lead to the entry of sewer gases into occupied space, which could lead to negative effects on indoor air quality, which could lead to harm to persons.

*Intent 2.* To limit the probability that an inability to access air admittance valves for inspection and maintenance purposes will lead to trap seal failure, which could lead to the entry of sewer gases into occupied space, which could lead to negative effects on indoor air quality, which could lead to harm to persons.

---

**Provision: 2.5.9.3.(5)**

**Objective**

OH1

**Attributions**

[F40, F81-OH1.1]

**Intent(s)**

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## **Intent Statements: NPC 2020**

*Intent 1.* To limit the probability of siphonic action or back pressure in drainage systems, which could lead to trap seal failure, which could lead to the entry of sewer gases into occupied space, which could lead to negative effects on indoor air quality, which could lead to harm to persons.

---

### **Provision: 2.6.1.1.(1)**

#### **Objective**

OS3

#### **Attributions**

[F31-OS3.2]

#### **Intent(s)**

*Intent 1.* To limit the probability that inconsistency in the location of controls will lead to persons confusing hot water controls for cold water controls, which could lead to exposure to scalding hot water, which could lead to harm to persons.

---

### **Provision: 2.6.1.1.(2)**

#### **Objective**

OH2

#### **Attributions**

[F71-OH2.3]

#### **Intent(s)**

*Intent 1.* To limit the probability that an inappropriate design will lead to inadequate water temperatures for bathing or cleaning, which could lead to poor hygiene and unsanitary conditions, which could lead to harm to persons.

---

### **Provision: 2.6.1.2.(1)**

#### **Objective**

OP5

#### **Attributions**

[F81-OP5]

#### **Intent(s)**

*Intent 1.* To limit the probability that an inability to drain or blow out systems will lead to freezing as a result of heating system failure or seasonal shutdown, which could lead to the failure of the water distribution system, which could lead to the leakage of water, which could lead to damage to the building or facility.

---

### **Provision: 2.6.1.3.(1)**

#### **Objective**

OP5

#### **Attributions**

[F81-OP5]

#### **Intent(s)**

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## **Intent Statements: NPC 2020**

*Intent 1.* To limit the probability that a lack of shut-off valves or inappropriately located shut-off valves will lead to an inability to quickly shut off the water supply if leaks occur, which could lead to damage to the building or facility.

---

### **Provision: 2.6.1.3.(2)**

#### **Objective**

OP5

#### **Attributions**

[F81-OP5]

#### **Intent(s)**

*Intent 1.* To limit the probability that a lack of shut-off valves or inappropriately located shut-off valves will lead to an inability to quickly shut off the water supply in the event of leakage, which could lead to damage to the building or facility.

---

### **Provision: 2.6.1.3.(3)**

#### **Objective**

OP5

#### **Attributions**

[F81-OP5]

#### **Intent(s)**

*Intent 1.* To limit the probability that a lack of shut-off valves or inappropriately located shut-off valves will lead to an inability to quickly shut off the water supply if leaks occur, which could lead to damage to the building or facility.

---

### **Provision: 2.6.1.3.(4)**

#### **Objective**

OP5

#### **Attributions**

[F81-OP5]

#### **Intent(s)**

*Intent 1.* To limit the probability that the lack of shut-off valves or inappropriately located shut-off valves will lead to an inability to quickly shut off water in the event of leaks, which could lead to damage to the building or facility.

---

### **Provision: 2.6.1.3.(5)**

#### **Objective**

OH2

#### **Attributions**

[F70, F72-OH2.1, OH2.3]

#### **Intent(s)**

*Intent 1.* To limit the probability that a lack of shut-off valves in each suite will lead to widespread water service interruption in the building in the event of leakage in a suite or of maintenance, renovations or

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## **Intent Statements: NPC 2020**

repairs being performed in a suite, which could lead to a lack of water for bathing and cleaning, which could lead to poor hygiene and unsanitary conditions, which could lead to harm to persons in other parts of the building.

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### **Provision: 2.6.1.3.(6)**

#### **Objective**

OH2

#### **Attributions**

[F70, F72-OH2.1, OH2.3]

#### **Intent(s)**

*Intent 1.* To limit the probability that a lack of shut-off valves on fixtures will lead to widespread water service interruption in the event of leakage, or of maintenance, renovations or repairs being performed on any one fixture, which could lead to inadequate water for washing or cleaning, which could lead to poor hygiene and unsanitary conditions, which could lead to harm to persons.

---

### **Provision: 2.6.1.3.(7)**

#### **Objective**

OH2

#### **Attributions**

[F70, F81-OH2.1, OH2.3]

#### **Intent(s)**

*Intent 1.* To limit the probability that a lack of shut-off valves on pipes to hot water tanks will lead to widespread water service interruption in the building, house or suite in the event of leakage, or of maintenance or repairs being performed on hot water tanks, which could lead to inadequate water for bathing or cleaning, which could lead to poor hygiene and unsanitary conditions, which could lead to harm to persons.

---

### **Provision: 2.6.1.4.(1)**

#### **Objective**

OP5

#### **Attributions**

[F81-OP5]

#### **Intent(s)**

*Intent 1.* To limit the probability that inadequate frost protection for an exterior water pipe or an inability to isolate and drain the exterior portion of water pipes in winter will lead to freezing, which could lead to the failure of such pipes, which could lead to leakage, which could lead to damage to the building or facility.

**Provision: 2.6.1.5.(1)**

---

**Objective**

OP5

**Attributions**

[F20, F81-OP5]

**Intent(s)**

*Intent 1.* To limit the probability that the lack of a check valve will lead to inadvertent entry of hot water into water service pipes, which could lead to weakening of piping or fitting material, which could lead to leakage under pressure, which could lead to damage to the building or facility.

**Provision: 2.6.1.6.(1)**

---

**Objective**

OH2

**Attributions**

[F72-OH2.1]

**Intent(s)**

*Intent 1.* To limit the probability that an inadequate water capacity for flushing will lead to the accumulation of waste in fixtures, which could lead to unsanitary conditions, which could lead to harm to persons.

**Provision: 2.6.1.6.(2)**

---

**Objective**

OH2

**Attributions**

[F72-OH2.1]

**Intent(s)**

*Intent 1.* To limit the probability that a lack of individual, manually operated flushing devices will lead to fixtures not being flushed after each use, which could lead to the accumulation of waste in fixtures, which could lead to unsanitary conditions, which could lead to harm to persons.

**Provision: 2.6.1.6.(3)**

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**Objective**

OE1

**Attributions**

[F130-OE1.2]

**Intent(s)**

*Intent 1.* To limit the probability that water closets and urinals will use an unnecessary amount of water, which could lead to excessive use of water, which could lead to an unacceptable effect on the environment.

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## **Intent Statements: NPC 2020**

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### **Provision: 2.6.1.6.(4)**

#### **Objective**

OH2

#### **Attributions**

[F81-OH2.1]

#### **Intent(s)**

*Intent 1.* To limit the probability that single-flush water closets installed in residential retrofits will have an inadequate amount of water, which could lead to insufficient flow velocity to move solids in the system, which could lead to blockages in waste pipes, which could lead to a sanitary drainage system backup, which could lead to unsanitary conditions, which could lead to harm to persons.

---

### **Provision: 2.6.1.6.(5)**

#### **Objective**

OE1

#### **Attributions**

[F130-OE1.2]

#### **Intent(s)**

*Intent 1.* To limit the probability that flush-tank-type urinals will not be installed with an integral means of limiting water use, which could lead to unnecessary flushing of such urinals when not in use, which could lead to excessive use of water, which could lead to an unacceptable effect on the environment.

---

### **Provision: 2.6.1.7.(1)**

#### **Objective**

OS3

#### **Attributions**

[F31, F81-OS3.2]

#### **Intent(s)**

*Intent 1.* To limit the probability that a lack of pressure-relief valves, excessively high opening pressure of pressure-relief valves or an inappropriate location for pressure-relief valves will lead to water pressure in hot water tanks exceeding the tanks' rated working pressure, which could lead to rupture or bursting of storage tanks, which could lead to harm to persons.

---

### **Provision: 2.6.1.7.(2)**

#### **Objective**

OS3

#### **Attributions**

[F81-OS3.1, OS3.2]

#### **Intent(s)**

*Intent 1.* To limit the probability of water in hot water tanks exceeding 99°C under all operating conditions, which could lead to the formation of steam, which could lead to pressure in hot water tanks exceeding

the tanks' rated working pressure, which could lead to storage tank rupture or steam in water distribution systems, which could lead to exposure to pressurized steam, which could lead to harm to persons.

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**Provision: 2.6.1.7.(3)**

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**Intent(s)**

*Intent 1.* To clarify that requirements for pressure relief and temperature relief are permitted to be satisfied by a combination device.

---

**Provision: 2.6.1.7.(4)**

---

**Objective**

OS3

**Attributions**

2.6.1.7.(4)(a) [F31-OS3.2] [F81-OS1.1]

2.6.1.7.(4)(b) [F81-OS3.1, OS3.2]

**Intent(s)**

*Intent 1.* To limit the probability that:

- the lack of pressure-relief valves will lead to water pressure in hot water tanks exceeding the tanks' rated working pressure, or
- the lack of temperature relief valves will lead to an inability to vent excessively high-temperature water, which could lead to the formation of steam, which could lead to pressure in hot water tanks exceeding the tanks' rated working pressure.

This is to limit the probability of rupture or bursting of storage tanks, which could lead to harm to persons.

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**Provision: 2.6.1.7.(5)**

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**Objective**

OS3

**Attributions**

[F31-OS3.2]

**Intent(s)**

*Intent 1.* To limit the probability that:

- inadequate size will lead to back pressure at relief valve outlets, which could lead to interference with proper pressure relief for protected devices,
- inadequate rigidity, inappropriate slope, inappropriate termination or excessive space between the end of the pipe and a floor drain will lead to misdirection of vented water,
- inadvertent blockage, connection or extension of pipes will lead to inoperability of relief systems, or
- use of inappropriate materials will lead to an inability to withstand temperatures to which it may be exposed, which could lead to the failure of the pipes.

This is to limit the probability of exposure to hot water or steam, which could lead to harm to persons.

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## **Intent Statements: NPC 2020**

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### **Objective**

OH2

### **Attributions**

2.6.1.7.(5)(b) [F81-OH2.2] Applies to the size of *air breaks*.

### **Intent(s)**

*Intent 1.* To limit the probability that the lack of an appropriate air break will lead to backflow from sanitary drainage systems, which could lead to contamination of water in tanks, which could lead to unsanitary conditions, which could lead to harm to persons.

---

### **Provision: 2.6.1.7.(6)**

---

### **Objective**

OS3

### **Attributions**

[F31-OS3.2]

### **Intent(s)**

*Intent 1.* To limit the probability that:

- the lack of relief valves will lead to an inability to vent excessively high-temperature water, or
- the inappropriate location of relief valves will lead to an inability to sense the highest temperature of water in tanks, which could lead to the failure of temperature-relief valves to vent excessively high-temperature water.

This is to limit the probability of water exceeding 99°C under all operating conditions, which could lead to the formation of steam, which could lead to pressure in hot water tanks exceeding the tanks' rated working pressure, which could lead to storage tank rupture, or steam in water distribution systems, which could lead to exposure to pressurized steam, which could lead to harm to persons.

---

### **Provision: 2.6.1.7.(7)**

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### **Objective**

OS3

### **Attributions**

[F31-OS3.2]

### **Intent(s)**

*Intent 1.* To limit the probability that the installation of shut-off valves will lead to isolation of relief valves, which could lead to inoperability of relief valves, which could lead to pressure in hot water tanks exceeding the tanks' rated working pressure, which could lead to the failure of the tank, which could lead to the exposure of persons to pressurized steam, which could lead to harm to persons.

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### **Provision: 2.6.1.7.(8)**

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### **Objective**

OS3

### **Attributions**

[F81-OS3.2]

**Intent(s)**

*Intent 1.* To limit the probability that the lack of a vacuum relief valve will lead to excessively low air pressure in tanks, which could lead to the fracture or collapse of tanks, which could lead to leakage of hot water, which could lead to harm to persons.

**Provision: 2.6.1.7.(9)**

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**Objective**

OP5

**Attributions**

[F81-OP5]

**Intent(s)**

*Intent 1.* To limit the probability that water will leak from the tank onto elements below, which could lead to damage to the building or facility.

**Provision: 2.6.1.7.(10)**

---

**Objective**

OP5

**Attributions**

[F81-OP5]

**Intent(s)**

*Intent 1.* To limit the probability that the drain pan will be inadequate [with regard to size, connected pipes, and location of drains] to contain and conduct any water that leaks from the tank, which could lead to damage to the building or facility.

**Provision: 2.6.1.8.(1)**

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**Objective**

OS3

**Attributions**

[F31-OS3.2] [F81-OS3.4]

**Intent(s)**

*Intent 1.* To limit the probability that the performance of systems for solar heating of potable water will fall significantly below expectations, which could lead to the failure of such systems, which could lead to an inability to limit water temperature, which could lead to excessively high water temperatures, which could lead to harm to persons.

---

**Objective**

OH2

**Attributions**

[F70-OH2.2]

**Intent(s)**

*Intent 1.* To limit the probability that the performance of systems for solar heating of potable water will fall significantly below expectations, which could lead to the failure of such systems, which could lead

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## **Intent Statements: NPC 2020**

to the backflow of heat-transfer media into potable water lines, which could lead to contamination of potable water, which could lead to harm to persons.

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### **Provision: 2.6.1.9.(1)**

#### **Objective**

OS3

#### **Attributions**

[F20, F81-OS3.2]

#### **Intent(s)**

*Intent 1.* To limit the probability that inadequate protection of water pipes will lead to excessive water hammer, which could lead to the failure of the water distribution system, which could lead to leakage of high-temperature water, which could lead to harm to persons.

---

#### **Objective**

OP5

#### **Attributions**

[F20, F81-OP5]

#### **Intent(s)**

*Intent 1.* To limit the probability that inadequate protection of water pipes will lead to excessive water hammer, which could lead to the failure of the water distribution system, which could lead to damage to the building or facility.

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### **Provision: 2.6.1.10.(1)**

#### **Objective**

OH2

#### **Attributions**

[F71, F70, F46-OH2.2, OH2.3]

#### **Intent(s)**

*Intent 1.* To limit the probability that:

- inadequate size will lead to inadequate water volume, which could lead to inadequate water for cleaning or washing,
- termination below ground will lead to backflow of groundwater into potable water systems,
- inadequate protection from mechanical damage will lead to damage to below-ground pipes during installation or removal of mobile homes, which could lead to leakage or backflow of groundwater into potable water systems,
- inadequate protection from frost-related movement will lead to damage to below-ground pipes, which could lead to backflow of groundwater into potable water systems, or
- the lack of a curb stop and a means of draining pipes, which could lead to freezing of water trapped inside pipes, which could lead to damage to pipes, which could lead to backflow of groundwater into potable water systems.

This is to limit the probability of unsanitary conditions, which could lead to harm to persons.

---

**Provision: 2.6.1.11.(1)**

**Objective**

OP5

**Attributions**

[F20, F81, F46-OP5]

**Intent(s)**

*Intent 1.* To limit the probability that inadequate protection will lead to an inability to resist pressure buildup in a closed loop due to thermal expansion of water within a closed water distribution system, which could lead to damage to or failure of pipes or fittings, which could lead to leakage, which could lead to damage to the building or facility.

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**Provision: 2.6.1.12.(1)**

**Objective**

OS3

**Attributions**

[F40-OS3.4]

**Intent(s)**

*Intent 1.* To limit the probability that an insufficient hot water storage temperature will lead to the proliferation of legionella bacteria, which could lead to harm to persons.

---

**Provision: 2.6.2.1.(1)**

**Objective**

OH2

**Attributions**

[F70, F81, F46-OH2.1, OH2.2, OH2.3]

**Intent(s)**

*Intent 1.* To limit the probability that inappropriate design or installation of devices could cause backflow and cause contamination of potable water, which could lead to harm to persons.

---

**Provision: 2.6.2.1.(2)**

**Objective**

OH2

**Attributions**

[F70, F81, F46-OH2.1, OH2.2, OH2.3]

**Intent(s)**

*Intent 1.* To limit the probability that inappropriate water treatment devices or apparatus will lead to intrusion of substances into the potable water system, which could lead to contamination of potable water systems, which could lead to harm to persons.

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## **Intent Statements: NPC 2020**

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### **Provision: 2.6.2.1.(3)**

#### **Objective**

OH2

#### **Attributions**

[F70, F81, F82-OH2.2, OH2.3]

#### **Intent(s)**

*Intent 1.* To limit the probability that the performance of backflow preventers will fall significantly below expectations, which could lead to the entry of contaminants from surrounding environments under backflow conditions into potable water, which could lead to the contamination of potable water, which could lead to harm to persons.

---

### **Provision: 2.6.2.2.(1)**

#### **Objective**

OH2

#### **Attributions**

[F70, F81, F46-OH2.1, OH2.2, OH2.3]

#### **Intent(s)**

*Intent 1.* To limit the probability that an inappropriate connection will lead to back-siphonage from connected sources other than potable water, which could lead to contamination of potable water systems, which could lead to harm to persons.

---

### **Provision: 2.6.2.2.(2)**

#### **Objective**

OH2

#### **Attributions**

[F70, F81, F46-OH2.1, OH2.2, OH2.3]

#### **Intent(s)**

*Intent 1.* To limit the probability that inadequate protection will lead to back-siphonage, which could lead to contamination of potable water supply systems, which could lead to harm to persons.

---

### **Provision: 2.6.2.3.(1)**

#### **Objective**

OH2

#### **Attributions**

[F70, F81, F46-OH2.1, OH2.2, OH2.3]

#### **Intent(s)**

*Intent 1.* To limit the probability that inadequate backflow protection will lead to an inability to resist back pressure from connected sources containing other than potable water, which could lead to contamination of potable water systems, which could lead to harm to persons.

---

**Provision: 2.6.2.3.(2)**

**Objective**

OH2

**Attributions**

[F70, F81, F46-OH2.1, OH2.2, OH2.3]

**Intent(s)**

*Intent 1.* To limit the probability that inadequate backflow protection will lead to an inability to resist back pressure, which could lead to backflow, which could lead to contamination of potable water supply systems with non-toxic substances, which could lead to harm to persons.

---

**Provision: 2.6.2.3.(3)**

**Objective**

OH2

**Attributions**

[F70, F81, F46-OH2.1, OH2.2, OH2.3]

**Intent(s)**

*Intent 1.* To limit the probability that inadequate backflow protection will lead to an inability to resist back pressure, which could lead to backflow of toxic substances, which could lead to contamination of potable water supply systems, which could lead to harm to persons.

---

**Provision: 2.6.2.4.(1)**

**Intent(s)**

*Intent 1.* To exempt certain residential full flow-through fire sprinkler/standpipe systems from the requirement to have backflow preventer.

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**Provision: 2.6.2.4.(2)**

**Objective**

OH2

**Attributions**

[F46, F70, F81-OH2.1, OH2.2, OH2.3]

**Intent(s)**

*Intent 1.* To limit the probability that inadequate backflow protection will lead to an inability to resist back-siphonage or back pressure, which could lead to the contamination of potable water systems with water from fire sprinkler/standpipe systems, which could lead to harm to persons.

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**Provision: 2.6.2.4.(3)**

**Objective**

OH2

**Attributions**

[F46, F70, F81-OH2.1, OH2.2, OH2.3]

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## **Intent Statements: NPC 2020**

### **Intent(s)**

*Intent 1.* To limit the probability that inadequate backflow protection will lead to an inability to resist back-siphonage or back pressure from fire department pumper connections, which could lead to the contamination of potable water systems with water from fire sprinkler/standpipe systems, which could lead to harm to persons.

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### **Provision: 2.6.2.4.(4)**

#### **Objective**

OH2

#### **Attributions**

[F46, F70, F81-OH2.1, OH2.2, OH2.3]

### **Intent(s)**

*Intent 1.* To limit the probability that inadequate backflow protection will lead to an inability to resist back-siphonage or back pressure from fire department connections, which could lead to the contamination of potable water systems with water from fire sprinkler/standpipe systems, which could lead to harm to persons.

---

### **Provision: 2.6.2.5.(1)**

#### **Objective**

OH2

#### **Attributions**

[F46, F70, F81-OH2.2]

### **Intent(s)**

*Intent 1.* To limit the probability that the interconnection of private water supply systems with public water systems will lead to the contamination of public water systems, which could lead to harm to persons.

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### **Intent(s)**

*Intent 1.* To direct Code users to Article 2.6.2.1. for the interconnection of private and public water supply systems.

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### **Provision: 2.6.2.6.(1)**

#### **Objective**

OH2

#### **Attributions**

[F70, F81, F82-OH2.1, OH2.2, OH2.3]

### **Intent(s)**

*Intent 1.* To limit the probability that an inability to isolate portions of potable water systems in such buildings or facilities will lead to the spread of contaminated water beyond the premise of origin, which could lead to the spread of a potentially severe health hazard, which could lead to harm to persons.

**Provision: 2.6.2.7.(1)**

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**Objective**

OH2

**Attributions**

[F70, F81, F46-OH2.1, OH2.2, OH2.3]

**Intent(s)**

*Intent 1.* To limit the probability that a lack of backflow protection of hose bibbs will lead to back-siphonage, which could lead to contamination of potable water systems, which could lead to harm to persons.

**Provision: 2.6.2.8.(1)**

---

**Objective**

OH2

**Attributions**

[F70, F81, F46-OH2.1, OH2.2, OH2.3]

**Intent(s)**

*Intent 1.* To limit the probability that contaminants and construction debris in uncleaned water systems will lead to contamination of potable water systems, which could lead to harm to persons.

**Provision: 2.6.2.9.(1)**

---

**Objective**

OH2

**Attributions**

[F70, F81, F46-OH2.1, OH2.2, OH2.3]

**Intent(s)**

*Intent 1.* To limit the probability that an inappropriate location for air gaps will lead to the ingress of noxious vapours from surrounding environments under backflow conditions into water distribution systems, which could lead to contamination of potable water systems, which could lead to harm to persons.

**Provision: 2.6.2.9.(2)**

---

**Objective**

OH2

**Attributions**

[F70, F81, F46-OH2.1, OH2.2, OH2.3]

**Intent(s)**

*Intent 1.* To limit the probability that inadequate air gaps will lead to the ingress of waterborne contaminants from surrounding environments into water distribution systems under backflow conditions, which could lead to contamination of potable water systems, which could lead to harm to persons.

**Provision: 2.6.2.10.(1)**

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**Intent(s)**

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## **Intent Statements: NPC 2020**

*Intent 1.* To clarify “critical level” for the purposes of Sentences 2.6.2.10.(3) and 2.6.2.10.(4).

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### **Provision: 2.6.2.10.(2)**

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#### **Objective**

OH2

#### **Attributions**

[F70, F81, F46-OH2.1, OH2.2, OH2.3]

#### **Intent(s)**

*Intent 1.* To limit the probability that an inappropriate location of installation will lead to vacuum breaker failures due to prolonged exposure to water supply pressure, which could lead to the ingress of contaminants from surrounding environments under backflow conditions into potable water supplies, which could lead to contamination of potable water, which could lead to harm to persons.

---

### **Provision: 2.6.2.10.(3)**

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#### **Objective**

OH2

#### **Attributions**

[F70, F81, F46-OH2.1, OH2.2, OH2.3]

#### **Intent(s)**

*Intent 1.* To limit the probability that an inadequate installed height for vacuum breakers will lead to the entry of contaminants from surrounding environments under back-siphonage conditions into potable water systems, which could lead to contamination of potable water, which could lead to harm to persons.

---

### **Provision: 2.6.2.10.(4)**

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#### **Objective**

OH2

#### **Attributions**

[F70, F81, F46-OH2.1, OH2.2, OH2.3]

#### **Intent(s)**

*Intent 1.* To limit the probability that an inadequate installed height for pressure vacuum breakers will lead to the entry of contaminants from surrounding environments under back-siphonage conditions into potable water systems, which could lead to contamination of potable water, which could lead to harm to persons.

---

### **Provision: 2.6.2.11.(1)**

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#### **Objective**

OH2

#### **Attributions**

[F70, F81, F46-OH2.1, OH2.2, OH2.3]

#### **Intent(s)**

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## **Intent Statements: NPC 2020**

*Intent 1.* To limit the probability that the lack of back-siphonage preventers will lead to the entry of contaminants from water closet tanks or bowls under back-siphonage conditions into potable water systems, which could lead to contamination of potable water, which could lead to harm to persons.

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**Provision: 2.6.2.12.(1)**

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**Objective**

OH2

**Attributions**

[F70, F81, F46-OH2.1, OH2.2, OH2.3]

**Intent(s)**

*Intent 1.* To limit the probability that the installation of a bypass or other devices that would make backflow preventers ineffective will lead to the entry of contaminants from surrounding environments under backflow conditions into potable water systems, which could lead to contamination of potable water, which could lead to harm to persons.

---

**Provision: 2.6.3.1.(1)**

---

**Objective**

OH2

**Attributions**

[F71, F72-OH2.1, OH2.3]

**Intent(s)**

*Intent 1.* To limit the probability that an inadequate flow will lead to the malfunction of fixtures in water distribution systems, which could lead to inadequate water for flushing, bathing or cleaning, which could lead to unsanitary conditions, which could lead to harm to persons.

---

**Provision: 2.6.3.1.(2)**

---

**Objective**

OH2

**Attributions**

[F72-OH2.1] [F70-OH2.2] [F71-OH2.3]

**Intent(s)**

*Intent 1.* To limit the probability that potable water systems will be inappropriately designed, fabricated or installed, which could lead to their performance falling significantly below expectations, which could lead to an inability to deliver sufficient quantities of water on demand for drinking, bathing, fixture flushing or cleaning, which could lead to unsanitary conditions, which could lead to harm to persons.

---

**Provision: 2.6.3.1.(3)**

---

**Objective**

OS1

**Attributions**

[F81-OS1.4]

**Intent(s)**

---

## **Intent Statements: NPC 2020**

*Intent 1.* To limit the probability that inadequate flow will lead to an insufficient supply of water to the fire sprinkler system, which could lead to improper operation of the system in a fire situation, which could lead to the fire not being suppressed or contained, which could lead to the spread of fire, which could lead to harm to persons.

---

### **Objective**

OH2

### **Attributions**

[F70, F71-OH2.1, OH2.3]

### **Intent(s)**

*Intent 1.* To limit the probability that an inadequate flow will lead to the malfunction of fixtures in potable water distribution systems, which could lead to inadequate water for flushing, bathing or cleaning, which could lead to unsanitary conditions, which could lead to harm to persons.

---

### **Objective**

OP5

### **Attributions**

[F81-OP5]

### **Intent(s)**

*Intent 1.* To limit the probability that inadequate flow will lead to an insufficient supply of water to the fire sprinkler system, which could lead to improper operation of the system in a fire situation, which could lead to the fire not being suppressed or contained, which could lead to the spread of fire, which could lead to damage to the building or facility.

---

## **Provision: 2.6.3.2.(1)**

---

### **Objective**

OH2

### **Attributions**

[F71, F72-OH2.1, OH2.3]

### **Intent(s)**

*Intent 1.* To limit the probability that undersized water distribution systems will lead to inadequate water for flushing, bathing or cleaning, which could lead to unsanitary conditions, which could lead to harm to persons.

---

## **Provision: 2.6.3.2.(2)**

---

### **Objective**

OH2

### **Attributions**

[F71, F72-OH2.1, OH2.3]

### **Intent(s)**

*Intent 1.* To limit the probability that undersized water distribution systems will lead to inadequate water for flushing, bathing or cleaning, which could lead to unsanitary conditions, which could lead to harm to persons.

**Provision: 2.6.3.2.(3)**

---

**Objective**

OH2

**Attributions**

[F71, F72-OH2.1, OH2.3]

**Intent(s)**

*Intent 1.* To limit the probability that undersized water distribution systems will lead to inadequate water for flushing, bathing or cleaning, which could lead to unsanitary conditions, which could lead to harm to persons.

**Provision: 2.6.3.2.(4)**

---

**Objective**

OH2

**Attributions**

[F81-OH2.1, OH2.2]

**Intent(s)**

*Intent 1.* To limit the probability that undersized water distribution systems will lead to inadequate water for flushing, which could lead to unsanitary conditions, which could lead to harm to persons.

**Provision: 2.6.3.3.(1)**

---

**Objective**

OS3

**Attributions**

[F80, F81-OS3.4]

**Intent(s)**

*Intent 1.* To limit the probability that a lack of protection against excessive static pressure in water system piping will lead to the high-velocity discharge of water from fixtures, which could lead to harm to persons.

*Intent 2.* To limit the probability that a lack of protection against excessive static pressure in water system piping will lead to the failure of plumbing system components, which could lead to harm to persons.

---

**Objective**

OP5

**Attributions**

[F81-OP5]

**Intent(s)**

*Intent 1.* To limit the probability that a lack of protection against excessive static pressure in water system piping will lead to the failure of plumbing system components, which could lead to damage to the building or facility.

---

## **Intent Statements: NPC 2020**

### **Provision: 2.6.3.4.(1)**

---

#### **Objective**

OH2

#### **Attributions**

[F71, F72-OH2.1, OH2.3]

#### **Intent(s)**

*Intent 1.* To limit the probability that inadequately sized water service piping will lead to an inadequate supply of water for flushing, bathing or cleaning, which could lead to unsanitary conditions, which could lead to harm to persons.

### **Provision: 2.6.3.4.(2)**

---

#### **Objective**

OH2

#### **Attributions**

[F71, F72-OH2.1, OH2.3]

#### **Intent(s)**

*Intent 1.* To limit the probability that inadequately sized water service piping will lead to an inadequate supply of water for flushing, bathing or cleaning, which could lead to unsanitary conditions, which could lead to harm to persons.

### **Provision: 2.6.3.4.(3)**

---

#### **Objective**

OH2

#### **Attributions**

[F71, F72-OH2.1, OH2.3]

#### **Intent(s)**

*Intent 1.* To limit the probability that undersized connectors will lead to an inadequate supply of water for flushing, bathing or cleaning, which could lead to unsanitary conditions, which could lead to harm to persons.

### **Provision: 2.6.3.4.(4)**

---

#### **Objective**

OH2

#### **Attributions**

[F81-OH2.3]

#### **Intent(s)**

*Intent 1.* To limit the probability that undersized piping will lead to an inadequate supply of hot water for bathing or cleaning, which could lead to unsanitary conditions, which could lead to harm to persons.

---

**Provision: 2.6.3.4.(5)**

**Objective**

OH2

**Attributions**

[F71, F72-OH2.1, OH2.3]

**Intent(s)**

*Intent 1.* To limit the probability that undersized water distribution systems will lead to inadequate water for flushing, bathing or cleaning, which could lead to unsanitary conditions, which could lead to harm to persons.

---

**Provision: 2.6.3.5.(1)**

**Objective**

OH2

**Attributions**

[F81-OH2.1, OH2.3]

**Intent(s)**

*Intent 1.* To limit the probability that a lack of protection against excessive flow velocities in water system piping will lead to erosion of the piping material, which could lead to the rupturing of piping, which could lead to unsanitary conditions, which could lead to harm to persons.

---

**Objective**

OP5

**Attributions**

[F81-OP5]

**Intent(s)**

*Intent 1.* To limit the probability that a lack of protection against excessive flow velocities in water system piping will lead to erosion of the piping material, which could lead to the rupturing of piping, which could lead to damage to the building or facility.

---

**Objective**

OS3

**Attributions**

[F81-OS3.1]

**Intent(s)**

*Intent 1.* To limit the probability that a lack of protection against excessive flow velocities in water system piping will lead to erosion of the piping material, which could lead to the rupturing of piping, which could lead to harm to persons.

---

## **Intent Statements: NPC 2020**

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### **Provision: 2.7.1.1.(1)**

#### **Objective**

OH2

#### **Attributions**

[F81-OH2.2]

#### **Intent(s)**

*Intent 1.* To limit the probability that the performance of non-potable water systems will fall significantly below expectations, which could lead to the failure of such systems, which could lead to unsanitary conditions, which could lead to harm to persons.

---

### **Provision: 2.7.1.1.(2)**

#### **Objective**

OH2

#### **Attributions**

[F82-OH2.2]

#### **Intent(s)**

*Intent 1.* To limit the probability of inappropriate use of non-potable water, which could lead to harm to persons.

---

### **Provision: 2.7.1.1.(3)**

#### **Objective**

OH2

#### **Attributions**

[F40-OH2.2]

#### **Intent(s)**

*Intent 1.* To limit the probability of exposure to contaminated substances, which could lead to exposure of persons to chemicals and pathogenic micro-organisms, which could lead to harm to persons.

---

### **Provision: 2.7.1.1.(4)**

#### **Objective**

OH2

#### **Attributions**

[F46-OH2.2]

#### **Intent(s)**

*Intent 1.* To limit the probability that the interconnection of non-potable and potable water systems will lead to contamination of potable water systems, which could lead to harm to persons.

---

**Provision: 2.7.1.1.(5)**

**Objective**

OS3

**Attributions**

[F80, F81-OS3.4]

**Intent(s)**

*Intent 1.* To limit the probability that a lack of protection against excessive static pressure in non-potable water systems will lead to the high-velocity discharge of non-potable water from fixtures, which could lead to harm to persons.

*Intent 2.* To limit the probability that a lack of protection against excessive static pressure in non-potable water systems will lead to the failure of plumbing system components, which could lead to harm to persons.

---

**Objective**

OP5

**Attributions**

[F81-OP5]

**Intent(s)**

*Intent 1.* To limit the probability that a lack of protection against excessive static pressure in non-potable water systems will lead to the failure of plumbing system components, which could lead to damage to the building or facility.

---

**Provision: 2.7.1.2.(1)**

**Objective**

OH2

**Attributions**

[F46-OH2.2]

**Intent(s)**

*Intent 1.* To limit the probability that inadequate identification and markings on non-potable water piping and outlets will lead to the inadvertent interconnection of non-potable and potable water systems, which could lead to contamination of potable water systems, which could lead to harm to persons.

---

**Objective**

OH2

**Attributions**

[F81-OH2.2]

**Intent(s)**

*Intent 1.* To limit the probability that inadequate identification and markings on non-potable water piping and outlets will lead to the inadvertent use of non-potable water, which could lead to the consumption of contaminated substances, which could lead to harm to persons.

---

## **Intent Statements: NPC 2020**

---

### **Provision: 2.7.1.3.(1)**

#### **Objective**

OH2

#### **Attributions**

[F46, F40-OH2.2]

#### **Intent(s)**

*Intent 1.* To limit the probability that the unexpected failure of inappropriately located non-potable water piping will lead to the contamination of potable water intended for human consumption, which could lead to the consumption of contaminated water, which could lead to harm to persons.

---

#### **Objective**

OH2

#### **Attributions**

[F40, F81-OH2.4]

#### **Intent(s)**

*Intent 1.* To limit the probability that the unexpected failure of inappropriately located non-potable water piping will lead to the contamination of potable food, drink or products intended for human consumption, which could lead to the consumption of contaminated substances, which could lead to harm to persons.

---

### **Provision: 2.7.1.4.(1)**

#### **Objective**

OH2

#### **Attributions**

[F40, F46-OH2.2]

#### **Intent(s)**

*Intent 1.* To limit the probability that an inappropriate location for outlets from non-potable water systems will lead to the inadvertent use of non-potable water for functions which require potable water, which could lead to the consumption of contaminated substances, which could lead to harm to persons.

*Intent 2.* To limit the probability that non-potable water system outlets will discharge into a fixture into which an outlet from a potable water system discharges, or into a fixture that is used for the preparation, handling or dispensing of food, drink or products that are intended for human consumption, which could lead to the consumption of contaminated substances, which could lead to harm to persons.

---

### **Provision: 2.7.2.1.(1)**

#### **Intent(s)**

*Intent 1.* To clarify that the term “rainwater” in Subsection 2.7.2. means storm water discharged from above-ground roof surfaces.

---

### **Provision: 2.7.2.1.(2)**

#### **Intent(s)**

---

## **Intent Statements: NPC 2020**

*Intent 1.* To clarify the system components included in a non-potable rainwater harvesting system for the application of Subsection 2.7.2.

---

### **Provision: 2.7.2.2.(1)**

#### **Objective**

OH2

#### **Attributions**

[F46-OH2.2]

#### **Intent(s)**

*Intent 1.* To limit the probability of the inappropriate use of harvested non-potable rainwater, which could lead to the consumption or inhalation of contaminated water, which could lead to harm to persons.

---

#### **Attributions**

[F81-OH2.2]

#### **Intent(s)**

*Intent 1.* To limit the probability of the inappropriate use or misuse of harvested non-potable rainwater, which could lead to the consumption or inhalation of contaminated water, which could lead to harm to persons.

---

### **Provision: 2.7.2.3.(1)**

#### **Objective**

OH2

#### **Attributions**

[F41-OH2.2]

#### **Intent(s)**

*Intent 1.* To limit the probability that vehicular or pedestrian traffic will contaminate roof surfaces that supply rainwater to non-potable rainwater harvesting systems, which could lead to the consumption or inhalation of contaminated water, which could lead to harm to persons.

---

### **Provision: 2.7.2.3.(2)**

#### **Objective**

OH2

#### **Attributions**

[F41-OH2.2]

#### **Intent(s)**

*Intent 1.* To limit the probability that the materials used to construct roofing components and conveyance systems will lead to the contamination of rainwater supplied to the non-potable rainwater harvesting system, which could lead to the consumption or inhalation of contaminated water, which could lead to harm to persons.

---

## **Intent Statements: NPC 2020**

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### **Provision: 2.7.2.4.(1)**

#### **Objective**

OH2

#### **Attributions**

[F46, F80, F81-OH2.2]

#### **Intent(s)**

*Intent 1.* To limit the probability that the performance of non-potable rainwater harvesting systems will fall significantly below expectations, which could lead to the failure of such systems, which could lead to unsanitary conditions, which could lead to harm to persons.

---

### **Provision: 2.7.2.4.(2)**

#### **Objective**

OH2

#### **Attributions**

[F41-OH2.2]

#### **Intent(s)**

*Intent 1.* To limit the probability that non-potable harvested rainwater will be contaminated by water from an evaporative heat rejection system or from the area immediately below the evaporative heat rejection system, which could lead to the consumption or inhalation of contaminated water, which could lead to harm to persons.

---

### **Provision: 2.7.2.4.(3)**

#### **Attributions**

[F40-OH2.2]

#### **Intent(s)**

*Intent 1.* To limit the probability that non-potable rainwater harvesting systems will be provided with inadequate means of treating non-potable water, which could lead to unsanitary conditions, which could lead to harm to persons.

---

### **Provision: 2.7.2.4.(4)**

#### **Objective**

OH2

#### **Attributions**

[F41-OH2.2]

#### **Intent(s)**

*Intent 1.* To limit the probability that non-potable rainwater harvesting systems will be provided with inadequate means of treating non-potable rainwater, which could lead to contamination, which could lead to the consumption or inhalation of contaminated water, which could lead to harm to persons.

---

**Provision: 2.7.2.4.(5)**

**Objective**

OS3

**Attributions**

[F80, F81-OS3.4]

**Intent(s)**

*Intent 1.* To limit the probability that a lack of protection against excessive static pressure in non-potable rainwater harvesting systems will lead to the high-velocity discharge of rainwater from fixtures, which could lead to harm to persons.

*Intent 2.* To limit the probability that a lack of protection against excessive static pressure in non-potable rainwater harvesting systems will lead to the failure of plumbing system components, which could lead to harm to persons.

---

**Objective**

OP5

**Attributions**

[F81-OP5]

**Intent(s)**

*Intent 1.* To limit the probability that a lack of protection against excessive static pressure in non-potable rainwater harvesting systems will lead to the failure of plumbing system components, which could lead to damage to the building or facility.

---

**Provision: 2.7.2.4.(6)**

**Objective**

OH2

**Attributions**

[F81-OH2.2]

**Intent(s)**

*Intent 1.* To limit the probability that storage tanks for non-potable rainwater harvesting systems will be inappropriately designed or installed, which could lead to their performance falling significantly below expectations, which could lead to the failure of the such tanks, which could lead to leakage, which could lead to unsanitary conditions, which could lead to harm to persons.

---

**Provision: 2.7.2.4.(7)**

**Objective**

OH2

**Attributions**

[F81-OH2.2]

**Intent(s)**

*Intent 1.* To limit the probability that excess non-potable rainwater will be improperly directed, which could lead to flooding in buildings, which could lead to unsanitary conditions, which could lead to harm to persons.

---

## **Intent Statements: NPC 2020**

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### **Objective**

OP5

### **Attributions**

[F81-OP5]

### **Intent(s)**

*Intent 1.* To limit the probability that excess rainwater will be improperly directed, which could lead to flooding in buildings, which could lead to damage to the building or facility.

---

### **Provision: 2.7.2.4.(8)**

---

### **Objective**

OH2

### **Attributions**

[F81-OH2.2]

### **Intent(s)**

*Intent 1.* To limit the probability that water will backflow from drainage systems into non-potable rainwater storage tanks, which could lead to the contamination of water in the storage tank, which could lead to unsanitary conditions, which could lead to harm to persons.

---

### **Objective**

OP5

### **Attributions**

[F81-OP5]

### **Intent(s)**

*Intent 1.* To limit the probability that water will backflow from drainage systems into rainwater storage tanks, which could lead to flooding in buildings, which could lead to damage to the building or facility.

---

### **Provision: 2.7.2.4.(9)**

---

### **Objective**

OH2

### **Attributions**

[F46-OH2.2]

### **Intent(s)**

*Intent 1.* To limit the probability of the contamination of make-up water, which could lead to the consumption of contaminated water, which could lead to harm to persons.

---

### **Provision: 2.7.2.4.(10)**

---

### **Objective**

OH2

### **Attributions**

[F46-OH2.2]

### **Intent(s)**

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## ***Intent Statements: NPC 2020***

*Intent 1.* To limit the probability that non-potable water will discharge into the potable water system, which could lead to the contamination of the potable water system, which could lead to harm to persons.