



## PRELIMINARY IMPACT ANALYSIS

**PROPOSAL:** This proposal seeks to review joint Australian New Zealand Standard (AS/NZS) 3500.2 *Plumbing and drainage Part 2: Sanitary plumbing and drainage* to make minor amendments to the requirements for commercial dishwasher discharge.

Responsible Technical committee: Australian Standard Committee WS-014, *Plumbing and Drainage*

<b>NCC REFERENCE:</b>	<b>BCA Volume One:</b> N/A
For revisions or amendments to existing National Construction Code (NCC) referenced documents, provide additional information	<b>BCA Volume Two:</b> N/A
	<b>PCA Volume Three:</b> C1.3, CV2.2, C2.3 and C2.4.

<b>PROPONENT:</b>	Nominating organisation: N/A
	Nominating individual: Fred Reynolds
	Position: Independent Chair WS-014
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To differentiate between versions include the document date and/or version number	Version: 2
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### NATURE AND EXTENT OF THE PROBLEM:

As a Deemed to Satisfy solution, Appendix B of AS/NZS 3500 Part 2 only allows commercial dishwashers to connect to a disconnector gully with a 10m discharge pipe. However, dishwashers are frequently installed in complex locations and have no way of getting to a disconnector gully within 10m. Historical knowledge of the development of this specific provision is not known and is considered to be illogical since there is other

equipment in a commercial kitchen that is not constrained in this way (e.g. commercial kitchen sinks, waste disposal units, potato peelers).

Presently, the requirements are not being complied with, but no adverse effects have been noted. By removing the restriction it could reduce costs, by allowing a more flexible design for commercial kitchens.

This proposal seeks to expand the acceptable discharge points for commercial dishwashers depending on trap and waste size (refer to Attachment B).

## **OBJECTIVES:**

The objective of this amendment is remove the restriction on only connecting commercial dishwashers to a disconnector gully.

## **OPTIONS:**

There are two options presented to decision makers:

### **Option 1 – Retain the Status Quo**

The status quo will be regarded as the baseline, where the incremental impacts of each option is found to be a net cost, the status quo will be recommended.

This option will result in retaining the restriction on only allowing commercial dishwashers to drain through a disconnector gully.

### **Option 2. Revise Clause 13.25.3 of AS/NZS 3500.2**

This option would involve making amendments to Appendix B for commercial dishwashers to allow dishwashers to connect to different drains (not just a disconnector gully) while specifying nominal pipe sizes and lengths for each type of connection.

Changes to Clause 13.25.3 is also proposed and will result in deleting the requirement to only connect to a fixture trap and waste pipe and instead refer to Appendix B. The maximum number of commercial dishwashers connected to a single drain is then limited to 4 (CI 9.4.2).

Note, a non-regulatory option has been considered and deemed not feasible in this instance. Lack of training or explanation is not the problem and it is considered that more flexibility in drainage for dishwasher installations is required. On this basis, a non-regulatory approach to the problem has been discontinued by the analysis.

## **IMPACT ANALYSIS (OF ALL OPTIONS):**

### **Option 1 – Retain the Status Quo**

This would not solve the current problems with restricted drainage. With the lack of flexibility and the possible costly exercise developing a Performance Solution.

Anecdotally there is also a high rate of non-compliance with the current requirements which will continue to be unresolved should the status quo remain.

**Option 2 - Change the requirements for commercial dishwasher discharge.**

There would be no increased costs. There will be no impact on public health and safety since the discharge from dishwashers will only be brought into line with other commercial kitchen drainage requirements. Will have no widespread positive or negative impact on the community. There is a positive impact for commercial kitchen design and construction since the changes will allow a more effective installation of commercial dishwashers. Designers will no longer be constrained as to where to put the dishwasher, and the workspace can be designed for ergonomic efficiency. And there are potential cost savings from avoiding having to develop performance solutions.

**TRANSITIONAL MEASURES**

No transitional measures are considered to be required.

**CONSULTATION:**

This issue was discussed with both the plumbing inspectorate of the Sunshine Coast Council and the Backflow Prevention Association of Australia. Both stakeholders indicated that the current arrangements are not satisfactory.

Standards Australia's WS-014 committee and the ABCB's Plumbing Code Committee have reviewed and endorsed the proposed amendment.

The proposed amendment will be released for public consultation in 2020.

**CONCLUSION AND RECOMMENDED OPTION:**

It is recommended that Option 2 be adopted since it reduces costs and increases flexibility of commercial dishwasher installations.

**IMPLEMENTATION AND REVIEW:**

It is intended that this amendment will be implemented as part of the 2022 NCC revision cycle.

**LIST OF ATTACHMENTS:**

Attachment A: Schedule of Major Changes

**Attachment A: SCHEDULE OF MAJOR CHANGES**

No.	Clause / Ref	Proposed Change	Justification / Reason for Change	Cost implications
1	13.25.3	Delete connection to a fixture trap and waste and replace with connections shall be in accordance with Appendix B	Current requirements have a lack of flexibility and costs associated with sub-optimal design and/or developing a performance solution	No Cost increases. Likely cost decreases

No.	Clause / Ref	Proposed Change	Justification / Reason for Change	Cost implications
2	Appendix B	See attached extract from the Table.		
3	9.4.2	Add four commercial dishwashers to CL 9.4 Fixtures to be connected Commercial or industrial buildings	To adjust for the new drainage methods.	No cost implications

**Appendix B Maximum length (m) of fixture discharge pipe without venting**

Fixture	Floor waste gully	Disconnector gully	Vented drain	Reduced velocity aerated stack system	Fully vented (modified)	Single stack	Single stack (modified)
(Domestic dishwasher) waste outlet hose connecting to riser of kitchen sink trap —							
Above the water seal of a DN 50 trap and waste	NA	6.0	NA	NA	2.5	2.5	2.5
DN 40 trap and waste	NA	6.0	NA	NA	2.5	2.5	2.5
DN 40 trap and DN 65 waste	NA	10.0	10.0	10.0	2.5	2.5	2.5
Commercial dishwasher							
<a href="#">DN 50 trap and DN65 waste</a>	NA	10.0	<del>NA</del> <a href="#">10</a>	<del>NA</del> <a href="#">10</a>	NA	NA	NA
<a href="#">DN 50 trap and DN50 waste</a>	<a href="#">NA</a>	<a href="#">NA</a>	<a href="#">NA</a>	<a href="#">2.5</a>	<a href="#">2.5</a>	<a href="#">2.5</a>	<a href="#">2.5</a>
Glass							
Untrapped DN 50 waste	1.2	NA	NA	NA	NA	NA	NA
DN 50 trap and waste	2.5	6.0	NA	NA	2.5	NA	NA
DN 50 trap and DN 65 waste	NA	10.0	10.0	10.0	2.5	NA	NA
COMBINATION PAN ROOM SINK							
DN 100 outlet	NA	NA	10.0	10.0	6.0	NA	NA