

17 May 2010

Harry Franklin  
Technical Building Officer  
Environmental Services  
North Shore City Council  
Private Bag 93500, Takapuna

Dear Sir

**APPLICATION NO:BE-1239130**  
**AT:138 Chivalry Road Glenfield 0629**

With regards to the above consent application, we are pleased to provide the following clarifications.

***Plumbing and Drainage Issues***

1. *The sanitary floor plan to show waste/drain connections via a floor waste gully or disconnector gully from the dental chairs. (Not shown).*

The waste from the dental chairs is discharged via suction line piped back to the suction units in the plant room. The suction line is shown in the mechanical drawings.

2. *Provide details of amalgam traps to the dental chairs.*

The waste from the dental chairs is discharged via suction line piped back to the suction units in the plant room, where the amalgam separator Durr CA4 is specified in the architectural equipment list for amalgam removal.

3. *Provide the acceptable solution design showing the work complying with the New Zealand Building Code.*

*a) – Backflow prevention to the dental chairs and washer/disinfector are required to be high hazard devices, eg RPZs. (DCVs only medium hazard).*

RPZs to replace DCVs on hot and cold water supply to dental chairs and washer /disinfector (as shown in the revised drawings H101 Rev.3.).

*b) – The trapped tundish waste from the (N3) air conditioning unit is not permitted to discharge direct to the drain, to discharge via a floor waste gully. What is the 'waste valve' for?*

The trapped tundish waste from the N3 air conditioning is discharge through a waste valve. The HepvO<sup>®</sup> or equivalent approved valve is to be used on the drain line (specified in the CDHB generic design specification).

The waste valve is a self-sealing waste valve that prevents the escape of foul sewer air from waste discharge systems, and actively maintains the pressure equilibrium in soil and waste installations. The self-sealing valve opens under the water pressure of an appliance emptying, and closes to form a tight seal after the appliance has discharged under normal atmospheric conditions.

The attached pdf provides for more information on HepvO valve specification and compliance with the current standards.

*c) – What prevents the trapped tundishes from the air conditioning units discharging to the basin traps becoming 'air locked' if basin outlets plugged? (Or can discharge via FWGs).*

The basin does not come with plug. The factory drain outlet from split type air conditioning units typically comes in the size of 12mm. The flow from the air conditioning discharge is relatively small compared to the size of tundish discharge line (40mm). Based on these, the chance of air lock is small.

*d) – A FWG required in the plant room, can be charged by the hot water cylinder tundish.*

A FWG is added in the plant room. The HWC tundish now discharged into the floor waste as shown in the attached revised drawings H101 Rev.3.

We trust the above information addresses the issues adequately. Please advise if you require any further information.

Yours faithfully,



Arthur Chin  
Buildings  
Aurecon Group Ltd