PERTH CHILDREN'S HOSPITAL — THERMOSTATIC MIXING VALVES

750. Ms L. Mettam to the Minister for Health:

I refer to the decision by the McGowan Government in August 2017 to identify thermostatic mixing valve (TMV) assembly boxes and brass components as the source of lead contamination in the water at the Perth Children's Hospital and I ask:

(a) Can the Minister confirm that every thermostatic mixing valve (TMV) assembly box and brass components in the Perth Children's Hospital was replaced before the hospital was opened;

(b) What was the total number of thermostatic mixing valve (TMV) assembly boxes that were replaced;

(c) Were any other brass plumbing fixtures in the Perth Children's Hospital replaced before the Hospital opened;

(d) Can the Minister confirm that there are no thermostatic mixing valve (TMV) assembly boxes with brass components currently in-situ in the Perth Children's Hospital;

(e) Can the Minister confirm that no other public health infrastructure built or commissioned in the past six years has had thermostatic mixing valve (TMV) assembly boxes with brass components installed;

(f) Is there a prescribed schedule of ongoing water quality testing at the Perth Children's Hospital;

(g) If yes to (f), what contaminants are being tested for;

(h) If yes to (g), has any water test conducted at the Perth Children's Hospital returned a result with elevated lead levels, or elevated levels of any other contaminants, since the hospital opened;

(i) If yes to (h) will the Minister provide the test results;

(j) Is there a prescribed schedule of ongoing water quality testing of the water in the ring main at the Queen Elizabeth II (QEII) site;

(k) If yes to (j), what contaminants are being tested for;

(l) If yes to (k), has any water test conducted in the past 6 years returned a result with elevated lead levels, or elevated levels of any other contaminants;

(m) If yes to (l) will the Minister provide the test results;

(n) Is there a prescribed schedule of ongoing water quality testing for any other facility on the QEII site;

(o) If yes to (n), what contaminants are being tested for;

(p) If yes to (o), has any water test conducted in the past 6 years returned a result with elevated lead levels, or elevated levels of any other contaminants; and

(q) If yes to (p) will the Minister provide the test results?

Ms A. Sanderson replied:

Prior to the opening of Perth Children's Hospital, the former Chief Health Officer led a review into the source of lead in PCH's water supply which identified the thermostatic mixing valve (TMV) assembly boxes as the likely source of lead contamination.

The review recommended that all TMV Assembly Boxes linked to drinking water outlets be removed and replaced.

(a)–(d) A total of 1453 thermostatic mixing valves have been replaced, 1433 prior to opening, and a further 20 since. Eleven TMVs remain in situ at PCH, none of which would be deemed to be drinking water outlets. These TMVs are primarily located in decontamination showers, not in areas used by staff or patients. This equipment requires a specific valve, for which no suitable alternative was available.

Similarly, brass isolation valves were removed and replaced with stainless steel valves.

(e) The Department of Health does not hold this information, however it is not aware of any instances where TMVs with brass components have been used.

(f) Ongoing water quality testing is standard practice at WA Health sites, including at the QEII campus. Perth Children's Hospital collects on average 620 samples per annum.

(g) Legionella sp, L. pneumophila (1), L. pneumophila (2-14), Pseudomonas aeruginosa, Chloride (low level), Filterable Reactive Phosphorus, Reactive Silica, Total Dissolved Solids, Calcium, Iron, Lead, Magnesium, HPC, Endotoxins, Total Phosphorus, Lead, E. Coli, Faecal (Thermotolerant) Coliforms, and Total Coliforms

(h) Routine sampling from opening on 18th May 2018 to date have identified a total of 381 exceedances across all water quality tests. There have been 35 exceedances of lead recorded to date since opening.

The exceedance levels are set to ensure any contaminants are identified early and to allow any required remediation to occur in a timely manner.

When an exceedance is identified, the location of the exceedance result is decommissioned from use, treated and flushed and then re-tested. The re-testing requires two clear tests before being re-commissioned for use. Adjacent sites are also tested on the initial positive result.

(i) Test results can be provided, however, due to the specialist technical nature of this information, it is recommended that results are interpreted by a subject matter expert, to avoid misinterpretation by a person with a non-technical background.

(j) Yes.

(k) Total Coliforms, E.coli, Total Antimony, Total Aluminium, Total Cadmium, Chloride, Total Chromium, Total Copper, Total Iron, Total Lead, Total Manganese, Total Nickel, Nitrate, Nitrite, Sodium, Sulphate, Total Zinc, Alkalinity, Calcium, Conductivity, Colour, Hardness, Magnesium, pH, Potassium, Total Dissolved Solids, Total Suspended Solids, and Turbidity.

(l) No

(m) Not applicable.

(n) Yes. At nominal distal outlets and incoming mains.

(o) As per (k).

(p) Yes.

(q) As per (i).