Approval

1. The GM 7100 Elite ("the system") described in the Specifications and Drawings in the attached Schedule and manufactured by Rainbow Storm Water Solutions Pty Ltd ("the manufacturer") (ABN 51 646 024 086) has been assessed in accordance with the Queensland Plumbing and Wastewater Code (QPW Code) dated 15 January 2013.

2. Approval is granted for a secondary quality wastewater treatment system, subject to compliance by the manufacturer with the requirements of the Plumbing and Drainage Act 2002, part 5 and the conditions of approval detailed below.

3. This approval, the conditions of approval and the Schedule comprise the entire Chief Executive Approval document.

4. Any modification by the manufacturer to the design, drawings or specifications scheduled to this approval must be approved by the Chief Executive.

Conditions of approval

5. The manufacture, installation, operation, service and maintenance of the systems must be in conformity with the conditions of this Chief Executive Approval.

6. The secondary quality wastewater treatment system may only be used on premises that generate per day:
   
   (a) a maximum hydraulic loading of 2,000L; and
   
   (b) a maximum organic loading of 700g BOD₅.

7. For the system to meet the requirements of a secondary quality wastewater treatment system, the system must produce the following effluent quality —
   
   (a) 90% of the samples taken must have a BOD₅ less than or equal 20g/m³ with no sample greater than 30g/m³; and
   
   (b) 90% of the samples taken must have total suspended solids less than or equal 30g/m³ with no sample greater than 45g/m³; and
   
   (c) 90% of the samples taken must have thermotolerant coliform count not exceeding 200 organisms per 100 mL with no sample exceeding 1000 organisms per 100mL.
   
   (d) Where chlorination is the disinfections process, the total chlorine concentration shall be greater than or equal to 0.5g/m³ and less than 2.0g/m³ in four out of five samples taken.

8. Each system must be serviced in accordance with the manufacturers details supplied in the owner’s service and maintenance manuals.

9. Each system must be supplied with —
   
   (a) a copy of this Chief Executive Approval document;
   
   (b) details of the system and ancillary equipment;
   
   (c) instructions for authorised persons for its installation;
(d) a copy of the owner's manual to be given to the owner at the time of installation; and
(e) detailed instructions for authorised service personal for its operation and maintenance.

10. This approval does not extend, apply to, or include the land application system used in conjunction with an approved system installed on premises.

11. At each anniversary of the Chief Executive Approval date, the supplier must submit to the Chief Executive a list of all systems installed in Queensland during the previous 12 months.

12. Where the Chief Executive is notified of any system failures the Chief Executive may randomly select a number of installed systems for audit. The Chief Executive will notify the National Association of Testing Agencies (NATA) accredited laboratory nominated by the supplier, which systems are to be audited for Biochemical Oxygen Demand (BOD₅) and Total Suspended Solids (TSS). The sampling and testing of the selected systems, if required, is to be done at the supplier’s expense. The following results must be reported to the Chief Executive:

(a) Address of premises.
(b) Date inspected and sampled.
(c) Sample identification number.
(d) Biochemical Oxygen Demand (BOD₅).
(e) Total Suspended Solids (TSS).

13. The Chief Executive may, by written notice, cancel this approval if the manufacturer fails to comply with one or more of the conditions of approval; or within 30 days, to remedy a breach, for which a written notice been given by the Chief Executive.

14. This approval may only be assigned with the prior written consent of the Chief Executive.

15. This approval expires on 4 May 2021 unless cancelled earlier in accordance with paragraph 13 above.

Lindsay Walker
Director
Strategic Policy (Plumbing, Drainage, Committees and Special Projects)

Date approved: 4 May 2016
SCHEDULE

Attachment 1

Specifications for the

GM 7100 Elite
## Tank Dimensions

<table>
<thead>
<tr>
<th>Dimension</th>
<th>Measurement</th>
</tr>
</thead>
<tbody>
<tr>
<td>Diameter</td>
<td>2540mm</td>
</tr>
<tr>
<td>Height</td>
<td>2050mm</td>
</tr>
<tr>
<td>Bottom of tank to bottom of inlet</td>
<td>1600mm</td>
</tr>
<tr>
<td>3m x 3m x 2050mm deep from high side</td>
<td></td>
</tr>
</tbody>
</table>

## Chamber Capacity

<table>
<thead>
<tr>
<th>Chamber</th>
<th>Capacity</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>A</td>
<td>7100 Lt</td>
<td>Tank – AS 1546</td>
</tr>
<tr>
<td>B</td>
<td>3050 Lt</td>
<td>Septic Chamber</td>
</tr>
<tr>
<td>C</td>
<td>3300 Lt</td>
<td>Aeration Chamber</td>
</tr>
<tr>
<td>D</td>
<td>350 Lt</td>
<td>Clarifier</td>
</tr>
<tr>
<td>E</td>
<td>350 Lt</td>
<td>Chlorination Chamber</td>
</tr>
<tr>
<td>F</td>
<td></td>
<td>Biological Media</td>
</tr>
</tbody>
</table>

**NOTE:** TANK MUST BE INSTALLED ON A 60mm LAYER OF SAND
CHIEF EXECUTIVE APPROVAL No. 07/2016
Plumbing and Drainage Act 2002, part 5, division 1, section 93

SCHEDULE

Attachment 2

Drawings for the

GM 7100 Elite