



24th April 2024
Our Ref: 231244

Protector Australia
1 Government Rd
Braemar NSW, 2575

Attention: Anthony Pridham

Dear Anthony

RE: Tornado GPT functionality and equivalency

We refer to the following in-line Tornado GPT models:

- TGPT.65.610
- TGPT.110.7512
- TGPT.200.1015
- TGPT.320.1218
- TGPT.400.1518
- TGPT.720.1824
- TGPT.860.2124
- TGPT.1350.2430

Based on our review of the developed Tornado GPT product, it is our professional opinion that it can be considered equivalent to a continuous deflective separation gross pollutant trap based on the following:

- Equivalent inlet dimension ratios to maintain velocities for rotation and self-cleaning of the screen at capacity flow;
- Equivalent weir heights specified to maintain operational head at capacity flow;
- Equivalent stainless-steel screens;
- Identical expanded mesh screen and opening;
- Outlet dimensions sufficient for the flow rates expected through each unit;
- Equivalent sump volumes based on treatment capacity flow;
- A shear cone at the base of the screen to cut off the rotation and reduce the risk for resuspension of solids stored in the sump area;
- Sufficient pollutant storage; and





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- Sufficient access for maintenance of the GPT (it is noted that cleaning behind the screen for finer material requires removal of the screen but that a screen removal system is in place that could facilitate this).

Based on the above, it is expected that the Tornado GPT product will have equivalent functionality to a continuous deflective separation gross pollutant trap. It is noted that the models covered by this letter is an in-line unit and have limited internal bypass capacity. The designer will need to consider weir heights and hydraulic bypass arrangements suitable for the catchment and existing drainage network to avoid unacceptable hydraulic conditions and may require an offline diversion chamber with additional bypass depending on the capacity of the drainage network on which the unit is to be installed. The designer should also consider the buoyancy forces associated with the installation and any other site specific conditions.

It should be noted that some of the Tornado GPT models covered by this letter has limited diameter access manhole for maintenance. This means that the smaller models have to be cleaned using a suction truck as the maintenance access prevents it from being cleaned by a grab truck.

In addition, we note that the Tornado GPT product has an optional oil baffle that can be fitted to the system if required.

We acknowledge the extent of product development undertaken by Protector Australia to achieve a device that is technically equivalent in functionality to a continuous deflective separation unit, and it can claim "Continuous Deflection Separation Technology" has been achieved.

Kind regards,

Lars Hengren,

For and on behalf of

H&H Consulting Engineers Pty Ltd