

Condition 3.

1.

To some extent this is covered in the following sections, which add detail and are specific to the points raised. We have assumed this to be the case since there is overlap between Point 1 and Point 4 in particular. We hope this is satisfactory, and if not would request that a split between them be proposed that we can then work to.

In addition where some items are generic type, for example plastic inspection chambers made up of a base unit, risers and lid, and where there are multiple manufacturers of such items; we have merely detailed the main requirements and stated that they should be installed to manufacturer's installation guidelines, which vary slightly from product to product. Different contractors prefer different products and it is best to leave them free to choose the one that they prefer.

2.

See attached document "System outline".

See also "Layout" drawing for introduction.

See also "Drain down sump" drawing.

3.

We presume that this relates to drawing "Invert levels", and have added additional items that hopefully render it clearer. If it refers to a different drawing please identify it for us.

This drawing has now been expanded out into 5 drawings for clarity.

Pipe and invert #1 - overall site layout naming the blocks as detailed in #2-5.

Pipe and invert #2 - North greenhouses (which are the only ones to feed the north outfall)

Pipe and invert #3 - South east greenhouses (which feed the south outfall)

Pipe and invert #4 - East greenhouses (which feed the south outfall)

Pipe and invert #5 - South west greenhouses (which feed the south outfall)

See also "layout" drawing.

See also "Drain installation details" drawing.

4.

Diameter / depths etc. As far as we are aware all this information is submitted, but we have tried to make it clearer and split drawings, add text etc. to assist in this. This is all contained on the "Pipe and invert" drawings.

Inspection chambers. The system (other than the discharges to outfalls) is a flooded one, thus the height difference from the greenhouse gutter to the attenuation tanks provided the hydraulic gradient to allow for gravity operation. As such it is in general undesirable to have inspection chambers since these require to be sealed. Consequently these are only provided in limited locations: for the drain down sump / pumps, for the discharge from the orifice plates, and for the connection of the 3 orifice plate discharges to the southern outfall. This is normal in commercial greenhouse installations, which are of course unadopted drainage systems, and it is common to have drain pipe runs in excess of 500m with no ICs. Experience over decades on very many sites dictates that this is not a problem. The purpose of an IC is generally accepted to be for (a) inspection, and (b) maintenance. Inspection is not required in this manner since it is evident from the operation of the system, thus if there is a blockage along the main collector run it would be evidenced by overflow from the gutters up to that point, and if it were after the collector then all gutters would manifest it. Proper operation is evidenced by visible flow into the attenuation tanks. Experience and reason also dictate that for a large bore pipes with solely clean water in large volumes going along them

blockages are not likely to occur. Self propelled CCTV inspection devices can reach 200m from entry, and none of our runs are as long as this so this is not a problem if required.

5.

The exceedance in this case is to cater for (a) an event greater than the system capacity (which makes it greater than the 1:100 years event plus 40% for CCA), and (b) catastrophic failure of 1 of the tanks. It is based on impoundment, using the natural levels and earth bunds. This approach has been acceptable to date. The volume required is based on that of the largest tank in the group, and the volume available by the design to achieve this is simply the depth over the area (using battered banks) minus the footprint of the remaining tanks. The volumes are now shown on the drawings.

The required alterations to the exceedance drawings have been made, see drawings "SE exceedance", "SW exceedance", "E exceedance" and "N exceedance".

6.

Construction details for the headwall as agreed as part of the Ordinary Discharge Consent are enclosed, see drawings "Outfall North", "Outfall South", "Outfall construction v2" and also "Construction Notes".

7.

There are no trees on site that are close enough to be relevant to this proposal.

8.

"See attached drawing "Orifice plate outlet detail".

The installation is straightforward, with a tank connector from the attenuation tank connected to a pipe (all pipework 75mm PVC glued or threaded joints) passing through an isolating valve, then a T piece for connection to draindown valve (maintenance) and thence to a strainer (filter) and to the T where the flow will normally exit through the lower orifice plate, but as levels in the tank rise to above the upper orifice plate then through this too. Orifice plates are stainless steel with EPDM gaskets (both sides) and clamped in position by the flanges it is mounted between, with coupling bolts to hold it in situ. The outlet from the plates goes to an inspection pit, with low level exit (110mm dia) to the discharge outfall."

Condition 4 - verification

In view of the comments received, we ask that Condition 3 is resolved before further verification information is provided

Condition 7 Maintenance

See document "Maintenance and operation summary" and associated items now added to it (see list at end of it)."

We also note that there are additional requirements which came in with the 2024/5 change, which would in this case be retrospective, but additionally many of which really aren't relevant or helpful, for example pollution protocol to be included in maintenance. The site already has protocols for

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pollution in place under other regulations, and (a) it is not really likely that in the event of a pollution incident someone would look in the drainage maintenance document rather than the pollution incident action guidance, and (b) duplicate (redundant) information has a habit of being missed when systems are updated, and could end up with the 2 duplicates differing from each other which is not helpful (and this concept of redundancy has been established in planning, for example Circular 11/95 states that "a condition which duplicates the effect of other controls will normally be unnecessary).